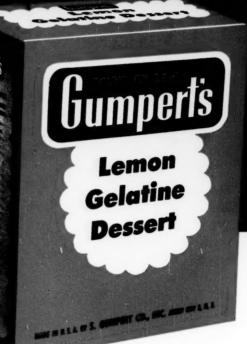


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New Primary School, Deerfield, III. Kindergarten room is one of eight classrooms grouped in the wing at the left in exterior photo. Gym-cafeteria unit is in the center, the administrative wing on the right. Exterior finish is colonial red brick with Indiana Limestone trin. for Happier School Days...

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PUBLISHING AND EDITORIAL OFFICES 919 N. MICHIGAN AVE., CHICAGO 11, ILL. SU perior 7-6402

EASTERN OFFICE 101 PARK AVE. NEW YORK 17, N.Y. MUrray Hill 3-2445

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Published monthly by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago II, Ill., U.S.A. Otho F. Ball, president: Raymond P. Sloan, vice president: Everett W. Jones, vice president: Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, \$3: foreign, \$4. Current copies, 35c each. Member, Audit Bureau of Circulation: Educational Press Association of America. Copyright 1952, by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc. Entered as second-class matter Jan. 16, 1928, at the Post Office at Chicago, Ill., under the Act of March 3, 1879. Published on the 15th of the month preceding the date of issue. Allow 30 days in advance of publication date for change of address.

MARCH 1952

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AMONG THE AUTHORS



Henry Hara

An old hand at the school survey business, HENRY HARAP is a man who doesn't lose interest in a locality after he has finished plowing into its soil. He is eager to know what the yield is on the ideas he has planted. Dr. Harap answers the question "Do School Surveys Produce Results?" both generally and specifically on page 35. He is

associate director of the division of surveys and field services of George Peabody College of Teachers and is author of several books on curriculum and on consumer education, the latter of a pioneering nature. He has had a strong directing hand in two state surveys and some 25 city and county surveys.

JACK GREAVES, author of the article on the Seattle centennial on page 39, couldn't fool anyone who reads the praise-piece into thinking he was always a zoology teacher, although he does act in that capacity at Roosevelt High School. Jack writes like a public relations man, which he was for four years for Edison Technical School, also in Seattle. "By 1951," he confesses, "I had had enough of deadlines and was determined to ride my hobby, marine biology and conservation. I dropped writing activities and became al zoology teacher, taking my family for the summer to the beautiful San Juan Islands to study marine life. I plan other summers of independent work on marine life, but, as you see, I am writing again and enjoying it."

EDGAR L. MORPHET'S is a name to conjure with in school finance, and it is on that knotty subject that he is writing on page 42. Tell it not in Tallahassee; publish it not in the streets of Miami Beach that one is quitting Florida for California. Dr. Morphet, formerly of the Florida State Department and later executive secretary of the Florida Citizens Commission on Education, wisely went to the U.S. Office of Education to be chief of school finance before moving on to Berkeley to become professor of education at California, a post he now holds. . . . One of his graduate students is GEORGE A. RICE Jr., his co-author. Mr. Rice assisted in preparing the report of the Phi Delta Kappa Commission on the Support of Public Education, frequently referred to in the article. Mr. Rice played a strenuous South Pacific rôle, but not with Mary Martin. He was booked with an all-navy cast in that theater, starting in 1941 as ensign; when the show closed in 1945 he was lieutenant commander.

BERNARD MARTIN DULSEY has produced in "The ——, White and Blue" (p. 45) an article many of us will wish we might have written or at least have had the idea for. Dr. Dulsey is a Spanish professor at the University of

Kansas City; he has taught also at De Pauw and Purdue and during the war was with the government censorship bureau and the army.

Teachers are blaming administrators and administrators are blaming teachers for reactionary and inappropriate educational programs, contends CLYDE M. CAMPBELL in an article on Structure on page 49. Dr. Campbell is chairman of educational administration at Michigan State College. He landed rather recently in Michigan (1945).



C. M. Campbe

being an Illini by birth, education and a 20 year school apprenticeship, chiefly administrative. Dr. Campbell does considerable writing on teaching and administration. He is president of the Professors of School Administration.

ALICE TOWNSEND BARLOW has been a newswriting gal since grammar school; now she is instructor in newswriting at Senior High School, Champaign, Ill., also public relations director for the school system. In the latter capacity and out of her own enthusiasm, she has written about the teacher evaluation program there (p. 63). She read about the Glencoe plan in The NATION'S SCHOOLS some months ago and thinks the Champaign program has enough differences to make it worth talking about.

MARGARET SCOGGIN has traveled enough in Europe recently to convince her of the need for the type of friendly program that the CARE, UNESCO Children's Book Program furnishes, with its opportunity for continuing correspondence between children and schools in the United States and the children and schools in at least 20 other countries. Miss Scoggin, whose article on the book program appears on page 66, is young people's specialist on the staff of the New York Public Library. She directs a weekly radio program on WMCA called "Young Book Reviewers" on which girls and boys of high school age discuss books old and new.

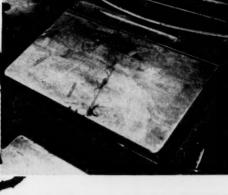


J. C. Schwartz Jr.

JOHN CHARLES SCHWARTZ Jr. (p. 72) is both associate professor of education at Los Angeles State College and audio-visual director of the Beverly Hills Unified Schools. He has been an elementary and a high school teacher so he knows about the administration of an audio-visual program from the under side. Mr. Schwartz

has diversified outside interests. He goes in for rose, camellia and iris culture, for photography, and for tennis and boxing. He was born in California and his traveling has all been in Pacific waters, part of it at navy expense.





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Education Majors Find Field Work With Youth Groups Rewarding in Credits Plus Leadership Experience . . . Grade School Pupils Make Best of Deferred Moving Day . . . High School Latin Club Play Wins Classical League Recognition

"EDUCATION 99, 199" could be dry or musty, and yet those four 9's seem to signalize something out of the ordinary. At Lewis and Clark College, Portland, Ore., the education course so catalogued is as dynamic as the personalities of the students themselves, although credit must be given also to Dr. Harold S. Tuttle, director of the experimental course, as being a strong energizing force.

For this is a field work course designed to give students practical training in working with youth groups. Forty students are registered this semester. They spend five hours a week for a whole school year as assistant leaders of groups of children or young people-in scout troops, Y's, community centers and churches. Too, they attend a weekly conference with their supervisor and with Dr. Tuttle where they talk over problems and

To dignify the course, the students get two hours' credit but they are given no grades. The measure of their



success lies in the behavior patterns of the children and youths under their leadership. If agency executives report that the groups are more cooperative, that trouble-makers have begun to accept responsibilities, that the shy are now participating, that the selfconscious are becoming group-conscious, then the leadership training course is considered successful.

Dr. Tuttle, in the last four years, has had more than 300 working under Education 99, 199. He isn't sorry he started the course, but there is one result he didn't anticipate: Teaching is losing a number of excellent prospects to social service. Quite a few students have switched from education to association, religious and juvenile court work.

THE 360 YOUNGSTERS who go to elementary school in Osceola, Ark., could have been very disappointed last fall when September came and their new building wasn't ready had it not been for an enterprising principal, Charlsie Little, and her 13 teachers.

Moving Day, which was to have been last summer, had to be postponed, owing to construction delays, until eight weeks after school began. The principal and the teachers decided that their teaching slogan would be "Learn-

ing Through Moving."

The children and the teachers worked and planned together to make the transition from the old building to the new smooth, happy and enlightening. They talked about the fine new building and the care necessary to keep it looking bright and new. They made rules about the use of drinking fountains, wash fountains and restrooms. They worked out safety measures to be observed on the buses and in the new building.

Names of the board of directors, the school officials, the cost of the new building, and some of its construction features were memorized. The children made booklets and kept diaries on their progress. Finally, Moving Day was almost upon them. They helped pack books and teaching materials. They ate their last lunch together in the old building, boarded the buses, entered the new schoolhouse, and spent the remainder of the day touring the building and getting acquainted with its fine new features.

ALICE CARLSON, Latin teacher, and her colleagues sometimes talked about Activities and wondered if they weren't getting out of hand. So when the Latin

Club youngsters, all college bound, came to Miss Carlson with some ideas she straightway put two limitations on club activities. These were: No picnics, no dances, no movies; any activity must be creative, and all preparation for an activity must be done outside of school time.

Miss Carlson's restrictions boomeranged. Her Latin Club chairman at Roosevelt High School, Honolulu, T.H., announced on Friday that a committee would be at Miss Carlson's house at 10 a.m. on Saturday to get her help in writing a play. Miss Carlson had Home Activities of her own on Saturday morning so she stalled them off until 1 p.m.

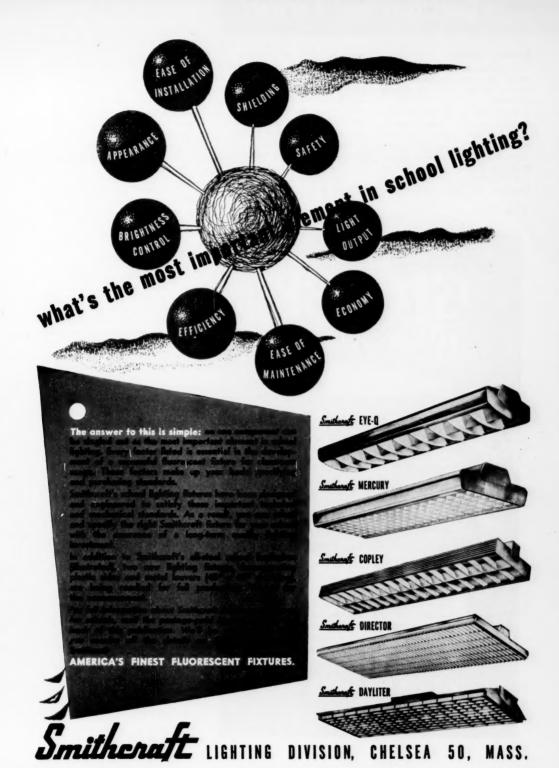
A boy and two girls squatted around her coffee table that afternoon and for



hours discussed, argued, wrote, crossedout and rewrote. In the end, they had a comedy script entitled "Furianus Gets a Father," written in English with Latin interspersed.

The play went into rehearsal, and the authors, who had never distinguished themselves in any major school activity, took hold at staging, costuming, acting or wherever their abilities lay, in grand style. The play was a hit. McKinley High School in Honolulu asked for permission to produce it. Next Miss Carlson sent the play to the American Classical League, where it was accepted for publication.

Said Miss Carlson: "Then we Latinphiles at Roosevelt High School realized that persistent study of Latin teaches a beautiful truth: Labor omnia



Vol. 49, No. 3, March 1952

Questions and Answers

Employe Liability

Is it permissible, obligatory or prohibited for school systems to carry personal liability or property damage insurance?

The answer to this question varies from state to state. In some states the carrying of such insurance is optional, in some states it is required, and in others it is forbidden—in some cases by statute, in others by court decisions.

It is generally held that a school board has only those powers that are specifically given it by statute and those necessarily implied therefrom. Unless, then, it is authorized or required by law to carry liability insurance, the right of the district to spend public funds for such insurance is questionable. In general, school districts have been held not liable for injuries growing out of the negligence of employes. If without legal liability, they do not need the insurance.

On the assumption that, apart from legal liability, a school district has a

moral obligation to provide some relief for those injured, some legislatures have passed laws making districts liable under certain conditions. When such is the case, the courts are likely to reason that the right to carry such insurance is implied in the law. Legislatures in some states have made it compulsory for school districts to carry insurance against certain types of liability.

In some states in which school districts are without legal liability, board members that have voted to purchase such insurance might be held liable for the misuse of public funds. In these cases, claims against the insurance company might be uncollectible.

Those boards contemplating carrying liability insurance should recognize the distinction between "liability insurance" and "indemnity insurance." In the first case, the insurance company agrees to pay for loss and becomes liable immediately upon injury. In the second case, the insurance company agrees to reimburse the district for any amount the district is required to pay because of judgment rendered against the district, and its liability arises only after that of the district has been determined. Because school districts are generally not legally liable, money spent for such insurance is quite often wasted as no protection is obrained.

Any district faced with the question of whether to obtain liability and/or property damage insurance should obtain competent legal advice concerning its liability and powers under state statutes and court decisions.

For a comprehensive treatment of one aspect of this problem the reader is referred to a recent publication of the U.S. Office of Education*.—LEE O. GARBER, associate professor of education, University of Pennsylvania.

Central or Room Library?

Should elementary schools have a central library rather than room libraries?

The answer to this question must be based upon many factors in the situation for which the decision is to be made. There is no conclusive answer to be given for all types of elementary schools. At least I do not know about conclusive evidence. The size of the school, its organization,



^{*}School Transportation Insurance. Washington: Government Printing Office, 1948. U.S. Office of Education Pamphlet No. 101, pp. 34. 15 cents.

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and the teacher load in the school should be taken into consideration and weighed with the advantages and disadvantages of each plan for organizing, caring for, and utilizing materials.

A central library has the disadvantage of being expensive as compared with classroom libraries, especially in small elementary schools. A room must be reserved for it; cataloging and processing of the books are costly, and teacher time for service connected with the library must be provided.

The foremost of its advantages is the fact that it can provide, as no group of classroom libraries can, a carefully selected and well balanced collection of books to meet children's needs for both recreational reading and instructional materials. The central library is usually administered by a teacher-librarian who is fitted by interest, experience and training to bring together children, teachers and books in ways that will provide boys and girls not only with the best of materials but also with stimulation to and guidance in their use.

The central library's similarity to the public library in organization forms a natural bridge between the use of books in school and the use of libraries outside of school and in adult life. The central school library also offers planned instruction and experience in the use of books and libraries.

The chief disadvantages of the classroom library system are the resulting lack of a varied and balanced collection available to all pupils and teachers, duplication of materials, and the fact that there is seldom a person available and able to coordinate the use of materials in the school, to help all teachers in the ever necessary search for better books to meet the needs of boys and girls, and to provide leadership in a schoolwide program for the maximum use and enjoyment of books.

The obvious advantage of the classroom library system is that, despite the loss of economy resulting from duplication of materials, it is still less expensive than a central library system. The other advantage sometimes claimed for it, that it places the books in the classroom where it is often best for them to be used, is not a sound one, as the central library makes available at all times classroom library collections which have freshness and diversion of interest not usually found in a fixed classroom library.-KEN-NETH E. OBERHOLTZER, superintendent of schools, Denver.

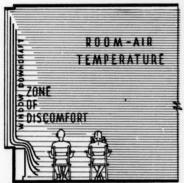


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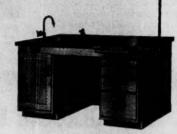
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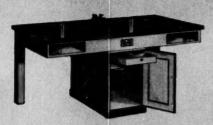
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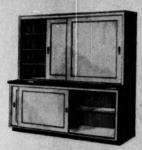
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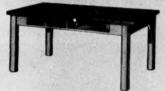
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Student Table No. L-0218 A solidly built table for a variety of uses in science classrooms, study halls, etc.—overall, 54° x 22° x 30°. Two book compartments, 154° x 34° x 179′. Long-wearing Hamilcote top. Birch, finished Colden Brown. NOTE: This table also available with drawers instead of book compartments; No. L-0219.



4-student Table No. Ls-0323 This table provides unusually efficient floor space utilization, accommodating 36 students comfortably in a clearroom 32 x 24—overall, 67 x 37 x 30. All appointments duplicate these of the L-0265 Table; number of hook compartments, cupheards, equipment trays and A.C. recognizes has been doubled. Two flush plates for upright reds; 4-way gas cock. Birch, finished Golden Brown.



Student Drafting Table No. V-1620 (Shown here with V-1621 and V-1623 units) The V-1620 Table, equipped with V-1621 Teel Drawer Unit and V-1623 Board Storage Unit, will serve 6 students. The two storage units can be exembled either to the right or left, offering maximum flexibility for most efficient utilisation of floor space. Simple, sturdy top adjusting mechanism. Birch, finished Golden Brown.



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Grerywhere...

VIRGINIA. At the Stratford Junior High School, Arlington County, the †PC Vision-Lighting Plan was utilized as a basic feature of the architectural design. Architect: Rhees E. Burket, Washington, D.C.

†This plan is a construction for daylight appening consisting of orientation-keyed areas of PC Functional Glass Blocks (selected for sun areas as required.

TEXAS. The Ursuline Academy, at Dallas, makes effective use of the 1PC Vision-Lighting Plan. Panels of PC Functional Glass Blocks provide ample daylighting, scientifically directed for maximum comfort and efficiency. PC Glass Blocks reduce operating costs, add to the appearance of any style building. Architects: Smith & Mills, Dallas, Texas.

MASSACHUSETTS. The †PC Vision-Lighting Plan was selected for the fenestration of the Green River School, Greenfield. The PC Functional Glass Blocks used here offer predictable performance. They cut heating and airconditioning costs, for they have more than twice the insulating value of ordinary single-glazed windows. Architect. Bernhard E. Dirks, Montague, Mass.

CALIFORNIA. PC Functional Glass Blocks make the fullest use of daylight at the Joseph C. Laney Trade School, Oakland. They seldom require repairs or replacements. There is no metal or wood sash for rust, corrode, rot or decay; no periodic pointing and puttying are needed. Architect. E. Geoffrey Bangs, San Francisco, Calif.







N school authorities choose PITTSBURGH CORNING FUNCTIONAL GLASS BLOCKS

CANADA. The newly-constructed Central Collegiate School at Oshawo, Ontorio, adopted the †PC Vision-Lighting Plan, incorporating PC Functional Glass Blocks, to "make the most of daylight" and to permit ventilation and vision to the outside. Architects: John B. Parkin Associates, Toronto, Ontario, Canada.



NEW YORK. Here, at the Watertown High School, Watertown, is a fine example of the †PC Vision-Lighting Plan. In classrooms, workshops, auditoriums, gymnasiums, PC Functional Glass Blocks admit floods of natural daylight, properly controlled. They contribute to safety, guard the privacy of students, cut off distracting views, reduce outside noises. Architects: Beardsley & Beardsley, Auburn, N. Y.; Sragent, Webster, Crenshaw & Folley, Watertown, N. Y.

In all parts of the country, PC Functional Glass Blocks have earned the enthusiastic approval of school administrators and staffs. That is because these glass blocks are scientifically designed to admit floods of natural daylight, properly directed and diffused for optimum comfort and utility. They have proved their value, too, in helping to create the "Co-ordinated Classroom," in which a learning environment is provided, keyed to the development of the whole child. Moreover, PC Glass Blocks—

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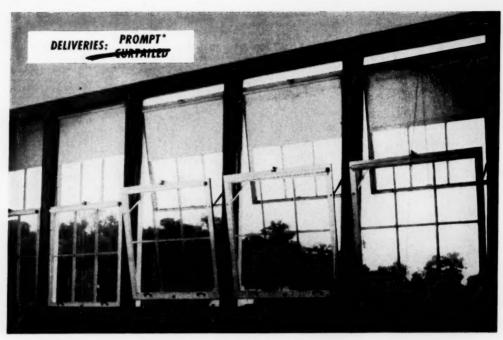
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DEAD-LINE - JULY 31, 1952

WHAT THIS CONTEST IS ALL ABOUT

Just to refresh your memory about this contest, it is sponsored by the makers of Delta Power Tools for the purpose of gathering and presenting the most advanced thinking on modern efficient school shop layouts.

You are urged to submit your ideas on this subject—as one of the men best qualified to know school shop requirements, now and in the future.

At the close of the contest the best plans submitted are to be assembled in book form—as a service to school men throughout the world.

IT'S EASY TO ENTER

All you do is send for the Delta Official Contest Kit. It contains all the information you need—Contest Rules and Instructions, Entry Form, Official Floor Plan sheets and full directions on how to prepare your entry.

Important: There's time enough to prepare your ideas if you act now! July 31 midnight is the dead-line—and it's getting closer.

WHO DETERMINES THE WINNERS?

As you also know, the contest entries will be submitted to a panel of five distinguished judges, all leaders in the field of Industrial Arts and Vocational Education—

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Repulsion-induction type. Belt drive, silent. Double row %" ball bearings. One-piece aluminum chassis. No gears or moving parts. Brush always level on floor. out, and is so easy to operate that anyone can use it. Thanks to advanced design and precision construction, Churchill's new Noiseless 16 also lasts longer, requires less repair, has more uses, gives much better results, saves time and labor. A valuable addition to any school's equipment. For details, call your Churchill distributor or representative today, or write...

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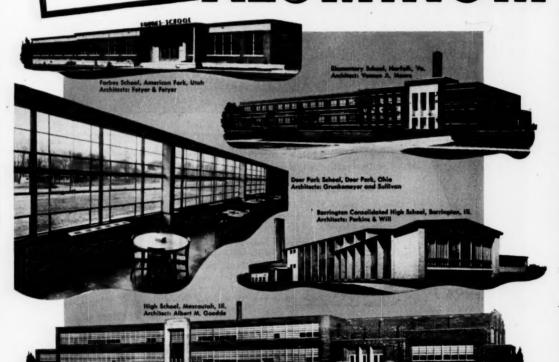
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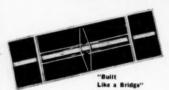
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The climate inside this modern schoolroom is right every day—right for health and comfort—right for study because it is heated and ventilated by a Herman Nelson DRAFT|STOP system. With DRAFT|STOP the children receive the proper amount of pure air, at the right temperature without chilling drafts from the big windows. DRAFT|STOP intercepts the cold air before it spills into the room. The captured air is either drawn into the unit and heated or expelled from the room.

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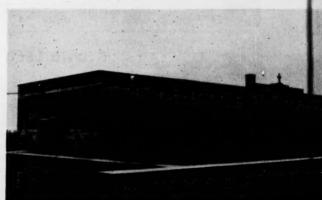
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By providing the proper heating, cooling and ventilation without drafts Herman Nelson DRAFT| STOP creates the perfect indoor climate for work and study. It should be part of your plans for a new school building or a modernization program. For further information write Dept.NS-3, Herman Nelson Division, American Air Filter Company, Inc., Moline, Illinois.

Henry Grew School; Hyde Park, Massachusetts. Ventilated by DRAFTISTOP—the modern system that improves student health and comfort. Superintendent of Schools, Dr. Dennis C. Haley; Architect, John M. Gray; Consulting Engineer, William McPherson.



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SYSTEM OF CLASSROOM
VENTILATION



...with CECO Metal Windows for Schools

As you read this your eyes are doing more than seeing-they are bringing into action your entire body-nerves, muscles, circulation.

And you are burning up energy—piling up fatigue in direct proportion to the amount of light available for vision. Medical science has proved eyestrain has a marked effect on the well-being of all. So it's necessary then that seeing be done with ease and in comfort. That's why proper illumination is all-important and there's where metal windows come in, for they admit more daylight than any other window.

Add to that fact, most days in most of the country are overcast in winter. Here again metal windows meet the need because only metal windows provide enough daylight for good vision on overcast days.

So there's good reason for the swing to Ceco Metal Windows in modern school construction. Besides giving more light for better sight, they permit distant vision so vital for relaxing young minds.

There are other advantages in Ceco Metal Windows-such as controlled ventilation—won't rot or warp—cost less to install, clean and maintain. And because Ceco Windows are better engineered they fit better—last longer. That's why we say—"When you use Ceco Windows you know you use the very best—you're sure of savings, too."

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In construction products CECO ENGINEERING makes the big difference

Looking Forward

Annual Reports Are Better

IN AN hour when the American Way of Life is being challenged by international enemies, this report is dedicated to continued cooperation of public education and free enterprise." So reads the foreword by Will C. Crawford, superintendent of San Diego city schools, in his 1950-51 annual report.

The report confronts false critics with page after page of documentary evidence that "the American system of free enterprise and our American system of public education have always worked together for the welfare of this great country."

Supt. Crawford cites verse and chapter from curriculum materials and daily activities in the San Diego public schools to show how this public school system (1) trains pupils to take a useful part in free enterprise, (2) teaches the fundamental principles underlying the American Way of Life, and (3) brings school children into direct contact with the operation of the free enterprise system.

An orchid to San Diego's "Our Schools and Free Enterprise" for the most timely and forceful report that has come to our desk this year although it ioses some of its punch because of the reproduction of photographs in a light blue ink.

It's been a joy to peruse several other 1950-51 annual reports that have been received recently. Most commendable is the fact that these publications anticipate questions in the minds of honest citizens. Consequently, they have ceased talking about economies effected in the purchase of pencils and have vividly told Mr. Taxpayer how schools really develop youth for citizenship in a democracy.

Such a story is dramatically told in "Citizens All," Supt. Arthur Dondineau's 1951 report for Detroit public schools. Pictures are used wisely. Type is large and well spaced. Content is organized under nine topics, with the significance indicated in the titles: (1) Pupils are citizens, too; (2) patriotic citizens—the basic goal; (3) responsibility—the foundation of citizenship; (4) citizenship education—search for a better way (refers to Citizenship Education—Study recently completed in Detroit after five years of cooperative research); (5) the fundamentals—basic citizenship skills; (6) agenda of school progress—highlights of 1951; (7) more citizens, more schools; (8) paying for good citizenship, and (9) for tomorrow's citizens.

We suggest that you beg, borrow, buy or if necessary threaten J. Harry Adams, superintendent of public schools at Elizabeth, N.J., in order to obtain a copy of his 1951 annual report, "See How They Learn." We've never seen anything quite like it. With cartoons and snappy script it entertainingly tells what is going on in good schools today. If you are fortunate enough to get a copy, we recommend it as required reading for those people in your community who still think that the blackboard and the textbook constitute the basis of all learning.

A thorough report, beautifully organized, is "What We Teach," the 1951 copyrighted report of Supt. Mark C. Schinnerer of Cleveland. Its 154 pages of excellent copy and dramatic pictures—the kind that really tell a story—is a better textbook for school administration and curriculum planning than many a textbook. The "what we teach" is prefaced by clear-cut, concise statements of "why" we teach certain subjects and ideas. "What We Teach" is not intended as a popularized report for public distribution. Cleveland reaches its citizens in other ways throughout the year with current information about its schools.

Once in a blue moon one hears a humorist who, while entertaining his audience, drives home some fundamental truths. This kind of entertainment is offered in printed word and colored cartoons by "Our Best Investment," published for the 1950-51 school year by Supt. Harold S. Vincent of Milwaukee. It's unique and effective, especially for the taxpayer who just won't concentrate on straight copy about his schools. It's a sugar-coated way of showing him how money spent for Milwaukee schools brings real dividends to him and his community.

Smaller school districts cannot afford such a large investment in annual reports, but a large and expensive report is not necessary. Seldom have we seen as effective a brochure as "Imperative Needs of Youth," put out by the public schools of Lakewood, Ohio, a suburb of Cleveland. Supt. Martin Essex reduced costs by having designs, photography and even typesetting done by students and teachers. Large pictures and well written captions tell clearly how Lakewood high school meets 10 imperative needs of all youth.

Two dozen well chosen pictures, concisely described, bring a "progress report" to patrons of Tulare County schools, Visalia, Calif. In a relatively inexpensive manner, County Supt. J. Post Williams shows how home, school and community are working toward the common aim of producing happy, useful citizens.

Most of the annual reports seen so far this year are better than ever. They visit with the citizen rather than overwhelm him with statistics and philosophical generalities. They use pictures, cartoons and color effectively. And in nearly every report that we have mentioned, the superintendent has emphasized that a better job of reporting was done because many people helped to do it.

Best Way to Teach Citizenship

S AID Thomas Paine in "The American Crisis": "If there must be trouble, let it be in my day that my child may have peace." This was written in 1776, but it is even more true today.

Most of us "older" folks share the guilt for the mess this world is in—not so much because of what we did but because of what we did not do. We have been so busy with our personal affairs and our professional ambitions that we have neglected our responsibilities as participating citizens in the civic life of our community and nation. We have let political "George" do it.

A wrong confessed may be half redressed, but the other half of our atonement is to dedicate our efforts toward eliminating some of the evils we have allowed to accumulate. Merely wishing that we can spare the youth in our schools today from the penalties of our mistakes, at home and abroad, is cowardice.

It will take some of our precious time really to find out about candidates, to vote in the primary, to write letters to our Congressmen, to make our wishes and opinions known to our local lawmakers and civic servants. It may be distasteful to get into politics. We may jeopardize our security. We may even get smeared.

It won't be easy to speak openly against practices and prejudices that destroy good will among men. It won't be easy for teachers and administrators to fight the forces in their own communities that handicap the school in its effort to develop citizens who can practice and improve our democratic way of life.

That's just a lot of preaching? Well now, honestly, is your own conscience clear?

Have you voted every time you should? Do you always know whom you're voting for?

Have you been willing to accept public office?

Do you write to your lawmakers—state representatives and Congressmen? In fact, do you know who they are? Do you actively support organized movements for re-

forms that you personally approve?

Some of us have been so engrossed in the theory of education, so busy teaching citizenship by textbooks and lectures that we forget to teach it by example.

Ethical Help From Industry

HERE is a booklet that industry leaders in your community should see. It answers the question: "How does a company get started in helping schools?"

Although published by an industry for distribution to fellow industrialists, it was prepared in cooperation with teachers and school administrators following a two-year study of the needs for education-industry cooperation. In this study, teachers asked for such help as: (1) plant study trips and discussions planned to fit the teacher's subject; (2) company personnel available for classroom discussions; (3) materials showing the connection between classroom and working world, and (4) joint sessions in which education and community seek continual improvement of the curriculum.

Said the director of the research: "There is much talk about use of community resources but not enough development of the specific practices. It is our effort to develop specific helps which will enable both the community and the schools to work together in modern educational programs."

Entitled "Partners in Community Enterprise," the publication is an attractive 40 page brochure, entertainingly illustrated in two colors. The content is sound and ethical. It insists that "teachers should determine what information and ideas best fit their needs." This is a welcome contrast to the propaganda purposes of "free instructional materials" subtly planned to advertise a product.

The brochure talks to industrial managers in language they will understand. An example: "What in heaven's name would an English teacher find of interest in an industrial plant?"

Answer: "You'd be surprised! She may be shocked by the colorful language of a mechanic dropping a wrench on his toe, but she would be interested in seeing the necessity for (1) clear, precise and correct self-expression in giving directions and making reports; (2) the company's communications program; (3) business reports and publications, and (4) ideas for correlating literature with the industrial progress of the nation."

In similar manner the booklet tells the manufacturer what teachers of science, business, art and other subjects want to know about industry. Then it sets up, step by step, the process by which industry and schools can get together in this "partnership" enterprise.

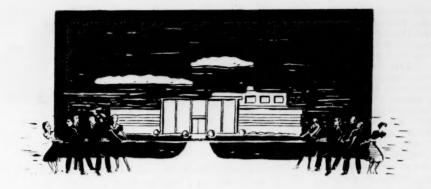
However, this partnership idea can be grossly misunderstood if it is assumed to apply only to relationships between industry and the schools. Equal opportunities exist for organized labor, commerce, agriculture and the professions to provide community resources for the schools' instructional program. We urge that these groups conduct studies and advise their colleagues in the same spirit and manner that the Iron and Steel Institute has done in "Partners in Community Enterprise."

If you can make constructive use of this booklet, we think the Institute will send you one free. The address is 350 Fifth Ave., New York 1, N.Y.

Those "Progressive" Greeks!

THE children . . . have bad manners and contempt for authority; they show disrespect for their elders." Sounds like a propagandist complaining about "progressive" schools, doesn't it? However, it happens to be a complaint from Socrates, who lived about four centuries before Christ.





Do SCHOOL SURVEYS produce results?

ADMINISTRATORS, teachers, consultants and professors often wonder what happens after school surveys have been made. This article reports as objectively as possible the results of 18 comprehensive surveys and how they were achieved.* In the last five years the division of surveys and field services of George Peabody College for Teachers conducted 21 comprehensive school surveys in 12 states. The survey experience covered 11 county, six city, and three state school systems and one individual school.

In this "survey" of surveys, a letter was sent to the head of each school system, asking him to discuss the outcomes of the survey informally. Later the results of 18 of the most representative surveys were studied intensively by a member of the division of surveys and field services.

The investigation required virtually a transcontinental journey. For each personal visit, the interview with the superintendent usually was the opening wedge for a series of conferences. Interviews and conferences were then held with the members of school boards and commissions, representative citizens, principals, teachers and pupils. In addition, a careful check was made of the action that had been taken to implement each specific recommendation.

*A full treatment of this study, bearing the same title, will be published shortly in a booklet by the division of surveys and field services, George Peabody College for Teachers, Nashville, Tenn.

HENRY HARAP

Associate Director, Division of Surveys and Field Services George Peabody College for Teachers Nashville, Tenn.

The full survey reports usually had been issued as printed, paperbound books; in several instances, the book was supplemented by an illustrated digest. The condensed version contained the important facts and recommendations in simple, concise and persuasive language with drawings and graphs in two or more colors. The full report gave the administration information that it could support with authority. The pictorial digest helped to point out the educational needs to a great many people who would not have been reached otherwise. (See samples on these pages.)

The superintendent of schools more than any individual or group was responsible for carrying out the survey recommendations. He initiated the changes and usually his school board followed his leadership.

The amazing contrast in gains made by two administrations living side by side in the same community demonstrated that it takes a survey plus a willing and alert administrator to achieve results.

The county superintendent in this community was indifferent and virtually nothing was done by his office to implement the survey recommenda-

On the other hand, the superintendent of the city schools was a good leader and an excellent organizer and got remarkable results. He won the respect and confidence of his board of trustees, which willingly appropriated funds for the equipment and beautification of buildings, for instructional supplies, and for a long-range program of professional growth. He organized a vigorous campaign under lay leadership, which resulted in a favorable vote on the term of board members, the increase of the tax levy. and the issuance of bonds. Behind the scenes he led a drive that induced the legislative delegation to introduce an amendment to the state constitution increasing the limit of a bond issue. Working cooperatively with the school board, administrators, teachers and an architect, he developed a master plan for the erection of new buildings for the school system.

Above: Typical illustration from a county survey report, that of Caddo Parish, Louisiana. The survey pointed out, among other items, that in the parish are several instances of overlapping and confusion in the administration of schools. "A good school system has definite policies to guide all phases of the school program."

As a rule the survey reports had an enthusiastic reception by the public and press. The local newspapers were always eager to give extensive coverage to the report as soon as it was released. When community groups or citizens' committees were organized, they took an active part in supporting the survey recommendations. The citizens of Orangeburg, S.C., were organized into a community council on education which conducted a sustained drive culminating in an increase in the tax levy, the issuance of bonds, and the development of a master plan of building construction.

Changes that were dependent upon remote centers of control came more slowly and with greater difficulty. Improvements in the individual schools sometimes depended upon action taken by such externally controlled agencies as the central administrative staff, the board of education, the city or county council, or the state legislature. Some educational changes hung on the outcome of a referendum of city, county or state electors. Generally speaking, educational changes varied in inverse ratio to the distance from the centers of control.

The implementation of the surveys that depended upon legislative action took a long and circuitous route. For example, in New Mexico a number of noncontroversial bills were passed by the legislature, but the more fundamental measures failed. In contrast, the educational forces in Idaho waged a more successful campaign to win legislative approval of their program. The survey commission worked in close harmony with the educational forces of the state. At the request of the commission, 24 measures were introduced, consisting of 17 bills and seven resolutions calling for constitutional amendments. Of these, 15 bills and two amendments passed. Surveys in which the consolidation

IS THE
ADMINISTRATION OF PUBLIC
INSTRUCTION
COORDI-

NATED ?



HUMPTY DUMPTY ...

Provision for coordinating the programs of the public-schools with those of the colleges was a recommendation of the New Mexico survey.

of schools was a major consideration were always opposed by the small communities and sometimes led to failure or compromise. For example, the survey report for Union County, North Carolina, recommended the consolidation of 13 small high schools into four large ones. None of the communities wanted to give up its local high school. When the bond issue to finance the construction of the new high school buildings was submitted to the people it was defeated by a vote of almost two to one.

The consolidation of school districts did not always require the relinquishment of neighborhood schools. When the legislators understood the difference between attendance units and taxing units they were better prepared to approve the consolidation of school districts. The clarification of this point helped to pave the way for the passage of the bills drafted by the Idaho Education Survey Commission.

On the basis of available data, 47.2 per cent of the recommendations in all the reported surveys were adopted. Allowing a ratio of 20 per cent progress in the small unreported gains of six school systems, the corrected figure led to the conclusion that 39 per cent of the recommendations were carried

out in the 21 comprehensive surveys made by the division of surveys and field services in the last five years. This figure represents only a partial report of progress, because the implementation of survey reports is an ongoing process; it is never complete.

The city school systems made considerably greater progress in adopting the recommendations than state or county state school systems made. City school systems encounter fewer legal or legislative obstacles; they have greater fiscal independence; they are more closely knit organizations; they have no fanatical opposition to consolidation: they have superior administrative leaders who have more direct control of the schools, and they have more taxable wealth. The differences in favor of the city over the county school systems are particularly striking in the fields of administration, business management, and physical

SUMMARY OF IMPROVEMENTS

The improvements that followed in the wake of surveys were reported fully for each school system. In this summary it is possible only to make some general observations and to illustrate some of the more significant gains that were reported.

The administrative staffs were reorganized and their functions were clearly defined

The superintendents of county and city school systems were particularly receptive to suggestions for the reorganization of their administrative and supervisory staffs. They not only added new members but also organized them into a few clearly defined divisions or departments headed by assistant superintendents.

Several county school systems im-

ARE COUNTY SUPERINTENDENTS WELL PREPARED?



The Idaho survey showed the need for higher qualifications for the office of county superintendent, for longer tenure in office, for better salaries.

proved and enlarged their administrative services. To illustrate, the board of education for Davidson County, Tennessee, provided the business department and the county school library with more spacious quarters. An assistant director of instruction, a supervisor of art, a supervisor of music, a director of instructional materials, and a psychologist were added to the administrative staff.

The newly appointed superintendent of schools in Jefferson County, Kentucky, reorganized the administrative staff under the leadership of a director of instruction and a director of business affairs. This clarification of relationships improved the morale of the entire system.

The city school systems made greatest progress in organization and administration of the schools. For example, the board of education for Report significant improvements in curriculum and teaching

Instructional improvement progressed slowly as an outcome of a school survey. The majority of the school systems, however, report that many significant recommendations were carried out. Some county and city school systems followed the suggestions faithfully.

For example, the board of education of Little Rock, Ark., adopted a policy of employing only college graduates for any position that required a certified teacher. The teachers organized many noncredit study groups and attended workshops to improve their teaching practices. A program of teachers in-service education was developed, including the consultative services of instructors from near-by colleges. Expenditures for instructional materials were considerably inmunity of about 150,000 people, approved a bond issue of \$20,000,000 for the construction of 38 new school buildings; the remodeling and renovation of 18 schools, and the building of additions to 13 schools.

The school plant at Little Rock, Ark., underwent an enormous change following the survey report. Five new elementary school buildings were constructed and many additions were made to old buildings. A long-range building program as recommended in the survey report is now under study by the board of education.

Suggestions readily accepted for improvement of pupil transportation

A good record of approval of survey recommendations in the field of pupil transportation was made by the state and county school systems. In Idaho, most of the survey recommendations were put into effect, including the enactment of a transportation code and regulations governing standard specifications for equipment, bus routes, drivers, maintenance programs, and operational practices.

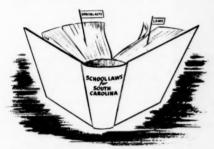
Several counties promptly proceeded to correct the deficiencies in pupil transportation revealed in the survey reports. For example, 10 new buses have been purchased by the board of education for Chatham County, Georgia, since the survey was completed. Drivers were required to take physical examinations as well as driving tests. As a means of improving the transportation service to the children, meetings of bus drivers were held monthly to study and discuss problems of serv-

State and city school financing improves; counties lag

ice and safety.

The adoption of the recommended program of financing the schools was frequently hemmed about by a variety of restrictions and limitations, such as the legislative and constitutional limits on the tax rate, the unpredictable outcome of a referendum on a special levy or bond issue, the financial ability of the political unit, the law assessed valuation of property, and so on.

In spite of the customary impediments, the state school systems made appreciable progress. In South Carolina the appropriation for salaries of classroom teachers rose from \$23,000,000 in 1947-48 to \$34,000,000 in 1951-52. The estimated average annual salary in 1951-52 was about \$2300 as compared with \$1637 at the



DO THE GENERAL SCHOOL LAWS REALLY GOVERN THE SCHOOLS?

No local exemptions from state school laws were advised for South Carolina.

Brentwood, Mo., added a director of instruction, a director of guidance, a school nurse, and a school physician to the central office staff. The superintendent formulated a plan that gave the community a clear understanding of how parents, teachers and administrators should function. The relationship among parents, teachers and principals has greatly improved.

The superintendents of five city and county school systems organized advisory councils in pursuance of survey recommendations. In Charleston, S.C., for example, the superintendent's advisory committee was formed with the following membership: all principals, deans, supervisors, the president of the Central Council of Teachers, and one teacher elected from each school. The next year 10 lay persons were added to the advisory council. It is the superintendent's intention to increase lay and decrease school representation and eventually to assign the chairmanship to a layman.

creased. The administration employed a supervisor of teaching aids whose services were made available through a division of audio-visual materials. Plans were made for the improvement of the teaching of the social studies, health and physical education.

The employment of a director of guidance helped to improve the counseling services to high school youth. Home economics was made a required subject in the seventh grade and an elective course in the eighth and ninth grades. The industrial arts offerings were expanded in all the secondary grades and two new teachers were added in the junior high school grades.

Counties and cities approve bonds for school buildings

The general approval of expenditures for physical plant indicated that the people had become aware of the need for the proper housing of school children and youth. For example, the citizens of Caddo Parish, La., a com-



Typical of the regrettable conditions found in state and county school surveys are these three photographs. Note auditorium being used as classroom.





time of the survey in 1947-48. The 1951 legislature passed a bill levying a 3 per cent sales tax to finance a three-point educational program providing an increase in the state aid schedule for salaries of teachers, a plan of state aid for school building construction, and a state system for the operation of transportation.

The financial recommendations in the county school survey reports were carried out only to a limited extent. For example, the school system in Chatham County, Georgia, reported considerable improvement in finance although it was not without its setbacks.

The salaries of teachers were increased 8.4 per cent the year following the survey. A contemplated additional increase, however, did not materialize because the referendum on a tax increase failed. The survey of the schools of Darlington County, South Carolina, made the citizens aware of school needs. Only four school districts have failed to increase the school levy since 1947. The average district increased its school levy from 22 to 26 mills.

The compactness of the city school systems as well as their well developed channels of communication helped to get prompt action on the improvement of financial resources. Following the survey recommendations, the schools of Orangeburg, S.C., increased the limit of assessed valuation for the issuance of bonds from eight to 15 per cent. The tax levy for current operational expenses was increased from 25 to 50 mills. The current annual expenditure per pupil increased from \$112 before the survey to \$142 in 1949-50.

Administrators appreciate suggestions for improvement of business management

An analysis of the survey reports showed that the business management of the majority of the city and county school systems was antiquated. The administrators of city and county school systems welcomed the suggestions for the improved management of the school system's business affairs and in several instances lost no time in putting them into effect.

From the administrator's point of view one of the most significant results of the survey of the schools at Spartanburg, S.C., was the elimination of dual administrative control. A business manager was employed who is directly responsible to the superintendent. An accounting system was installed which made the financial operation of the school system more understandable and efficient.

The business management of the public schools of Chatham County, Georgia, improved considerably. An assistant superintendent of business affairs was employed under whose direction many changes were effected which were recommended in the survey report. The general accounts were broken down into more specific categories. Additional bookkeeping machines and calculators were purchased to facilitate the work in the business office. A more detailed budgeting procedure was instituted, and the practice of carrying a large balance at the end of the fiscal year was discontinued.

RESULTS ARE REASSURING

Having consumed the time of many professional and lay people in carrying on this investigation, we naturally speculated on its value. We concluded that the experience was a wholesome and informative self-appraisal to the administrators and their associates who participated in the project. To those who made the surveys, it was reassuring to learn that, on the whole, the surveys had produced good results.

The Exact, the Beaver and other ships of a bygone day are seen here in the sixth-grade booth on ships and sea captains at the Centennial.

Public schools illustrate first hundred years of the SEATTLE STOK



JACK GREAVES

Teacher, Roosevelt High School Seattle, Wash.

WHATEVER doubts Seattle citizens may have concerning the future of public education came near being dispelled last fall when teachers and pupils combined to stage a giant 100th anniversary exposition for their city.

In four days and evenings more than 55,000 persons trooped to the spacious Civic Auditorium to view exhibits and performances portraying the founding of the city and the growth of every phase of its life. The conclusion was inescapable: The children have had a rich and vivid experience without neglecting the "Three R's."

And the children loved it. "Your children have been happily busy since early last year in reliving the days of our great city," Mr. Fleming told the people. "They have made the trip up the coast with our city's founders in the brave little schooner Exact to put into the shelter at Alki Point. They have built their crude log cabins, made friends with the Indians, suffered and triumphed with the Dennys, Terrys and others.

"As the pioneers have come to life for them," he continued, "your children have made of language, arithmetic, grammar, reading, science and art, tools for their study and expression. While enjoying the excitement of a story more fascinating than a fairy tale, they have been building sound skills in the fundamentals."

HOW IT STARTED

The first white settlers landed on the shores of Elliott Bay early in November 1851, and by fortunate coincidence the anniversary of this event falls during the annual observance of National Education Week. The idea for the schools to take over the centennial exposition was "a natural."

In cooperation with Greater Seattle, Incorporated, an organization which sponsored the over-all centennial celebration, planning for the exposition began nearly two years ago. A steering committee was set up and a coordinator appointed. Soon teacher and student committees were at work in each subject field, and as exposition time approached virtually every classroom became actively involved.

As the centennial spirit spread, classroom activities became geared to

"The Seattle Story." Nor were the obvious connections with the study of history, art and reading the only ones explored. Music classes learned pioneer songs as well as the folk music of many a cultural group that makes cosmopolitan Seattle its home. Physical education instructors brushed up on dances and games of similar nature. Research for authentic costuming brought to the classrooms a wealth of family treasures: colorful Chinese silks, Japanese kimonos, Scandinavian and Italian costumes. As more than 600 fifth and sixth graders perfected their steps for folk dance demonstrations, mothers and daughters sewed together on pioneer dresses.

Elementary school pupils studied the settlers' lives and learned their spinning and weaving, their trials, their worship, and their work. And they learned the lessons of America's greatness as they took part in their home town's lusty growth.

Seattle lies in the heart of "Paul Bunyan Land," and forest products



Seattle is a city of many nationalities. In this booth a daughter of the Chinese community is preparing a display honoring early Chinese residents of the city.

have played a large part in its development. Junior high school pupils demonstrated to centennial visitors what they had learned in a display entitled "Song of the Sawmills." Wasteful early-day logging practices were compared with modern conservation and reforestation technics in a series of models and dioramas, while pupils demonstrated new uses for wood products.

Visitors also saw similar displays of the physical changes that have affected Seattle's geography: the straightening of the Duwamish River, the filling of the tide flats, the regrading of the hills that once blocked business expansion, and the building of the ship canal that links the lakes with tide water.

Products of the sea, shipping and ships, the development of hydro-electric power, and land transportation came in for similar treatment with student-built relief maps and authentic bridge, ship and canal models.

MUSICAL REVUES PRODUCED

Students of dramatic arts in each of the eight high schools wrote and produced musical revues based on a colorful episode in the city's history. Among the themes included were "The Landing at Alki"; "The Sweetbriar Bride," the story of Seattle's first white bride; "Girls Came Here to Stay," the romantic story of the coming of the Mercer Girls in the Sixties; "The Gold

Rush," built around the arrival of the first million-dollar gold shipment from the Klondike; "The Alaska-Yukon-Pacific Exposition in 1909"; "The Balard Story"; "The First Graduation," and "Graduation Today." The many hundreds of students involved in staging, costuming, writing and research were proud to offer the crowds that packed the auditorium "two new and different stage shows every night."

PICTURE OF THE PRESENT

Exhibits and demonstrations by senior high school students were designed to show the activities and purposes of education today. Of 135 booths and exhibits in the exposition 35 were devoted to "live" demonstrations of senior high school classroom activities.

At this level student chemists exploded hydrogen bubbles; young physicists demonstrated the principles of light, sound and electronics; business students operated the latest in office machines; student leaders illustrated student government in action. In the driver-training exhibit guests were invited to test their coordination and depth perception on the department's newest equipment. Industrial arts displays featured modern shop machinery and pleasing modern furniture by student craftsmen.

Mathematics students demonstrated the use of the slide rule, sextant, quadrant and transit and gave away thousands of paper slide rules they had assembled. Editorial staffs of each of the high school newspapers published special exposition editions for distribution to visitors. Emphasis throughout the show was on the "up-to-dateness" of Seattle schools and the wise use being made of public money.

No visitor to the exposition could avoid the realization that education today offers a score of services never dreamed of in pioneer days. Among the special services exhibits each guest could learn of the work of the two custodial schools, the adjustment school, the classes for the deaf, sight-saving classes, first-aid training, safety education, speech correction, medical service, and aid to the cerebral palsied child

In another area the child guidance department, counseling and placement services, family life classes for adults, the libraries, English classes for the foreign-born, and audio and visual education were demonstrated. A continuous showing of educational films in a little theater offered instruction as well as rest to footsore visitors.

The Edison Technical School, center of technical and trade education for older students and adults, outlined the program it has developed in cooperation with employers and industrial and craft labor groups in a series of 21 "live" exhibits. Included were building trades, electrical trades, aircraft trades, automotive trades, food and restaurant trades, commercial dressmaking, millinery, power sewing, beauty culture, advertising art, watch making, and practical nursing. Visitors caught the noise, bustle and busy intentness of the trades classroom in each exhibit.

THE TOWN LOVED IT

How did Seattle like its school sponsored 100th birthday party? Newspaper editorials glowed with pride, and on every hand visitors were eager to express their satisfaction. As he examined an architect's model of a new classroom beside its pioneer counterpart, one visitor observed: "School was a lot different when I was a kid. A lot of us old timers should go back to school and learn to be better citizens."

And the sentiment among school people was unanimous: "The finest public relations project we ever attemped." The finest, yes, and the most inspiring for all taking part. Morale and cooperation within the corps were never better.



World map shows birthplace of foreign-born; hundreds of adults learn English each year in special classes.



"This is how students participate in school government," a student leader explains, showing slides of activities.

Local school administrators from Supt. Samuel E. Fleming on down are agreed that the two elements which made the exposition outstandingly successful were thorough planning and proper timing. The complete organization of the project along democratic lines, with plenty of time for discussion and consideration of all suggestions, resulted soon in such a flood of enthusiasm that each member of the corps caught the spirit of the enterprise. And the time was opportune since the feeling of the community was already focused on centennial affairs.

"I am not sure that the public schools alone could have created the enthusiasm that brought the unusual success that the exhibition achieved," said Supt. Fleming, "The community was ready and the schools took advantage of its readiness. I would say it was an achievement of corps morale and organization, aided and abetted by community rapport.

"The Seattle public schools were very fortunate in being able to catch on and go along with the community in its plans for the Seattle Centennial."

Rarely without a crowd of onlookers during the four-day show was this demonstration of electrical effects by students in science class.



Dhytomanha he Fun Luome

Only isolated small schools should be continued because of the distances involved and sparsity of population.

EVERY state and local school finance policy or practice has some effect on the educational program. This effect may be good or bad or good in some respects and bad in others.

In general the extent to which the effect of a finance policy or practice is good or bad may be determined on the basis of five common-sense criteria that would undoubtedly be acceptable, in theory at least, to virtually all lay citizens and educators. Any good finance policy or practice should help to assure:

1. Adequate educational opportunities for all who should be included in the educational program.

Reasonable equity for all taxpayers.

Maximum opportunity for the development and exercise of local educational leadership and responsibility.

Optimum educational returns from all expenditures.

 Maximum emphasis on sound long-range planning and evaluation based on bona-fide cooperative studies and research.

IN EVERY STATE

When these general criteria and their more specific corollaries are applied to the existing situation, it is

UNSOUND FINANCIAL

Every state and local school system can develop a sound financial program to meet the five criteria listed here

startling to note the effects of certain finance policies and practices on various aspects of the educational program. It becomes evident that many of the effects are far from desirable. In spite of the notable improvements that have been made in many states and local school systems during recent years, some unsound policies and practices are still found in virtually every state.

This situation may be partly explained, but not justified, by the influence of tradition and vested interests. Policies to which people have become accustomed or from which certain groups receive special benefits are difficult to change regardless of the inequities that may exist. However, the chief reason for the continued existence of many undesirable finance policies and practices is that the effects on the educational program have, in many cases, never been fully or definitely determined. When a policy has been adopted, it is commonly assumed that the effects will be good. Seldom has a local school system or a state developed a systematic and scientific plan for appraising a policy and determining its effects.

These facts were brought into clearer focus through a recent study of the Phi Delta Kappa Commission on the Support of Public Education, published under the title "Some Effects of Finance Policies and Practices on the Public School Program."1 This study, which attempted to determine some of the effects of the more important finance policies and practices in each of the states, was undertaken partly because of the interest of the commission in attempting to throw more light on this particular problem and partly because of the interest of the public education finance committee of the National Citizens Commission for the

¹The Phi Delta Kappan, September 1951.

Public Schools in having more information made available on this subject.

It is evident from this study that the effects of many existing finance policies and practices are not fully understood in most states. Even in the same state there is often disagreement among educators as to the net effects of a particular policy.

In a brief treatment of the subject it is obviously impossible to analyze the effects of all important policies and practices. Attention in this article therefore will be centered on a few major policies and practices and their effects on the educational program.

DEVELOPING FINANCE PROGRAM

The policies followed (or not followed) and the procedures used in developing a program of financial support for a state or local school system are likely to be most significant in determining the adequacy or inadequacy of the program, as well as in determining its effects on the schools. On the basis of studies that have been made over a period of years there is now available sufficient evidence to enable every state and local school system to develop a program that meets reasonably well the five basic criteria presented earlier in this article. However, it is evident that much of the available knowledge concerning procedures in developing a sound program is not being applied. Detailed statistical studies are still being made to determine average practice (pupilteacher ratios, for example), which is used in developing the state program. Similarly, many local school systems go to great lengths to determine average practices in presumably comparable communities and attempt to justify their own program in terms of these practices.

It should be obvious that a much

PRACTICES handicap education

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better policy would be to determine what services and facilities are necessary for a satisfactory program of education instead of attention being centered on average practice. A program based on average practice has all of the equities and inequities found in practice and is likely to have undesirable features as well as desirable features. A program based on careful determination of what is necessary to provide reasonably adequate educational opportunities for all should hold many more promising possibilities.

On the local level, programs are still being developed in many communities primarily to conform to the yield from a traditional tax levy rather than to provide a well balanced and realistic program. On the state level, all too often the educators agree upon what they think they can get from the legislature, then attempt to bring pressure to bear on the legislature to make the requested appropriations. Funds are still often apportioned on the basis of the pressures brought by special interest groups rather than on careful determination of needs.

How much better it would be for both state and local school systems to proceed systematically to involve lay citizens in carrying out studies necessary to determine what is actually needed and on that basis to develop a program that meets the five criteria. If such a procedure could be followed systematically the support for adoption of the program would come as much from lay citizens as from educators, because both groups would have participated in its development and would understand what is required in the way of financial support.

PREPARATION OF BUDGETS

Information assembled in connection with the Phi Delta Kappa study

shows that in many local school systems the preparation of the budget is still considered largely a statistical and financial procedure to be carried out by the central office staff. State committees attempted to determine which of these three practices in the preparation of budgets is generally followed in order to ascertain the effects on the educational program: (1) Budgets are prepared by the superintendent and his staff, with teachers and lay citizens having little or no part to play. (2) Teachers and principals participate actively in the development of the budget. (3) Provision is made for representative lay citizens to participate in determining the nature and scope of the services to be included in the budget.

An analysis of the returns indicates that the prevailing practice in most local school systems is for the supe-intendent and his office staff to prepare the budget, which is submitted to the school board and, when necessary, to other agencies for approval. Committees from at least half of the states agreed that this seems to be the prevailing practice and that the practice often results in lack of interest, understanding and support of the budget. Some representative comments concerning the effect of this practice are:

"Teachers and lay citizens do not understand many items in the budget. They often think more money is spent on administration, maintenance and operation than is actually the case."

"Little or no understanding of budget needs and provisions results in poor financial support."

However, the committees in a few states thought the practice was good in that it saved time and prevented complications.

In states where many local school systems involve not only the staff but also representative lay citizens in de-



Better support for the school program is found in communities in which lay citizens are involved in determining the nature and scope of the services that are to be included in the annual school budget.

veloping plans for the educational program (for which financial support is to be provided through the budget), committees generally considered this practice desirable. There is agreement that it usually means better support of the school program and of the budget than would otherwise be expected. Representative comments are:

"Better adaptation of school program to community needs. Broader understanding on the part of lay persons. Strengthening of public relations."

"Teacher participation helps teachers appreciate the importance of balanced budget and produces better acceptance by public."

"Lay advisory body gains community understanding and backing."

PARTNERSHIP PROGRAM

Most states have established some type of partnership foundation program in an effort to assure reasonably adequate educational opportunities for all communities. However, in a number of states the foundation program is so limited or involves such a small proportion of funds that it is almost meaningless.

Where the partnership foundation program plan is used, the commonest practice is to determine or measure ability to provide local funds on the basis of the local assessed valuation. If assessed valuations are uniform, this practice can be justified as sound and equitable. However, it is generally recognized that in most states local assessment practices are far from uniform. The ratio between assessed and actual valuation may be three or four times as high in some local school systems as in others.

It should be obvious that when a uniform minimum local tax levy is applied in districts with low assessment ratios, the proportion of state funds required for the foundation program would be much greater than if these districts had higher assessment ratios. Because the funds to be provided by the state for a partnership foundation program represent the difference between the cost of the program and the amount available from local required effort, states that use local assessed valuation regardless of uniformity of practice are in the position of providing a special subsidy for the districts that do the poorest job of assessing and at the same time penalizing the districts that do the best job. Representative comments regarding the effect of this practice on the educational program are as follows:

"Nullifies efforts to equalize."

"Tends to magnify existing inequal-

"Encourages low assessments and little contribution toward foundation program."

A number of the states have recognized the inequity of this practice and have moved in the direction of equalizing assessments or of using an equalized assessment ratio or an index of taxpaying ability as a basis for apportioning foundation program funds.

SPECIAL PURPOSE FUNDS

In spite of the fact that studies made over a period of years show the many undesirable effects that arise from special purpose funds, a large proportion of the states still provide aid at least partly through such funds. Several states have as many as 10 or 15 different state funds or appropriations for schools. These range all the way from funds that can be used for teachers' salaries only to funds for vocational education, for special services for exceptional children, for audiovisual instruction, and so on. Studies made by Mort,2 Burke3 and others have established rather clearly the fact



that special purpose funds tend to result in undesirable state controls of various phases of the program and to limit local initiative and responsibility.

Comments from committees in states having five or more separate special purpose funds illustrate the effect of this policy on the educational program.

"Undesirable, prevents flexibility."
"Best to make total appropriation
available to the local school system to
be expended as it deems best."

"Prevents comprehensive local planning for educational program and in many cases results in unbalanced support of services."

A certain number of the states have, during recent years, moved in the direction of establishing comprehensive foundation programs that provide funds for all phases of education without specifying in detail the proportion to be spent for each phase. This approach is recognized as highly desirable by states that have used the plan, as well as by authorities who have studied it.

Several recent studies have directed attention to the fact that the number of special purpose funds should be kept to a minimum, not more than one or two, to meet special needs. They have also indicated that, when established, these funds should be considered temporary grants to be merged with the foundation program funds as soon as the service is justified or is properly organized in all districts.⁴

SMALL DISTRICTS AND SCHOOLS

In an effort to assure adequate educational opportunities for all children a number of states have adopted finance policies that have resulted in the perpetuation of unnecessary small districts and small schools. This policy has sometimes come about as a result of studies using average practice as a basis for developing the program. Average practice for small schools and

Mort, Paul R.: State Support of Public Education, American Council on Education,

"Burke, A. J.: Financing Public Schools in the United States, New York City, Har-

per Brothers, 1951.

'See, for example, National Council of Chief State School Officers: Our System of Education, Washington, D.C., 1950.

small districts necessarily recognizes the extra cost that is involved in attempting to operate programs and thus tends to provide special subsidies for such schools and districts. Not much reorganization of small districts or consolidation of small schools is likely to occur when special subsidies are provided at the expense of the taxpavers of the entire state.

COMMITTEE COMMENTS

Comments from committees in states that provide special subsidies for all small districts indicate the following effects on the educational program:

"Perpetuates small, weak, inefficient districts"

"Discourages reorganization of districts."

"Tends to perpetuate small and weak districts with poor schools."

"Promotes waste and inefficiency in terms of acceptable education."

An analysis of the state plan indicated that 19 instruction units would be provided for three small high schools having a total enrollment of 300 pupils as long as those small schools were continued. However, if they were consolidated, only 12 units would be provided. As would be expected, little consolidation is occurring in that state.

A more recent tendency has been to make special adjustments only for isolated schools that must be continued because of the distances involved and the sparsity of population. The state support plan is then so adjusted that if unnecessary districts or schools are continued the extra expense of operation will be borne by the local tax-payers.

The problem of determining the effect of finance policies and practices on the educational program is one that needs much further study. Only limited evidence concerning the effect of most practices has been accumulated thus far. It is evident from the studies that have been made that many aspects of the educational program are being handicapped by finance policies and practices that cannot be defended. If every state and local school system could develop a plan for cooperative effort in analyzing realistically the effect of the existing finance policies and practices on the educational program, these handicaps would be more clearly realized and the demand for improvements would undoubtedly become strong enough to overcome the effects of tradition and vested interests.

THE ____,* WHITE AND BLUE

BERNARD DULSEY

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IN LINE with recent world political events the suggestion I am about to make seems altogether fitting and proper. In order to preserve a good deal of American culture now threatened by subtle Communist propaganda we must purify our language. We must purge it of a certain color adjective that we no longer dare employ. Let us rid ourselves of the word—...

Make today a——letter day and eschew mention of this color from now on. Let us all swear on oath that our ruby——lips shall never more deign to pronounce that word. Let it be a criminal offense to be caught——handed uttering that despicable monosyllable. Of course, we shall all have to make certain adjustments in our lives.

For example, I propose that we change the titles of certain books and stories to conform with my suggestion. Thus an American child will read "Little—Riding Hood" and sing "Roses are —, violets are blue." As he grows up he will undoubtedly become familiar with "Ruggles of — Gap" and "The —— Badge of Courage." When mature he may read "The —— and the Black" or "The —— Lily."

The singer of popular songs should be able to adjust in a short time to "Rudolph, the ——-Nosed Reindeer," "—— Sails in the Sunset," "The Lady in _____," and the nostalgic "_____ River Valley."

Thus the radio fan will not have to become—— as a beet when he hears——Skelton. And if he is a sports enthusiast he can listen to——Barber broadcast games of the Washington——skins or the Boston——Sov.

American advertisers must likewise conform. The motorist must be asked to stop at the sign of the Flying —
Horse. Round the world cruises will be booked through the —— Sea, or rerouted around the Cape of Good Hope.

The inebriate may get a —— nose from purple grapes or by the steady intake of ——eye. If he gets into a brawl and loses too many —— corpuscles he may get medical attention from the —— Cross.

The nature lover will roam the California ——woods, exclaim over the ——buds and hark to the cheery call of the robin ——breast.

Even the politicians must watch their step. Their speeches must be free of herrings. Their new laws must avoid — tape.

From the foregoing it can readily be seen how easily we can all get along without that un-American color. I feel sure that every ——-blooded American will approve my idea. Three cheers for the ——, White and Blue!

*Please, read "dash" for each ----.



CURRICULUM EXPERIMENT

in junior high school

ESSIE OLIVER

Eighth Grade Teacher Apopka Memorial High School Apopka, Fla.

OUR experimental program in junior high curriculum at Apopka, Fla., is now entering its fifth year. Since the seventh grade children face the most difficult personal and physiological adjustments of their developmental years, it was felt that the usual hourly class and teacher rotation plan placed an additional adjustment burden upon the individual pupils. From the teacher's point of view it was equally difficult. Classes were large, and the hourly change did not permit the teacher to be-

come acquainted with individual needs until the school year was well under way, or at least too far advanced for corrective work to be really effective.

Often students had become involved in disciplinary problems, which usually resulted in poor academic work and failures. At this age level even small successes and praise are of vital importance. Consequently, four years ago our seventh grade began scheduling with one teacher for all subject matter other than art, music and physical education. Results indicated higher achievement at all aptitude levels, minimum disciplinary problems, and a generally better adjusted eighth grade student.

This year finds us in another experimental stage. Our seventh and eighth

> In the seventh grade at Apopka High, the pupils in industrial arts work on projects in wood, sheet metal and mechanics; in the shop two groups are shown at work.



grades operate as a six-teacher block. type of teaching program. For example, 7-1 and 8-1 sponsors teach their own groups in the morning with are free for a planning period at the same time, and all eighth grade teachers are free for the same purpose at the following period.

In addition to straight required subject matter each morning's program includes definite instruction in reading and spelling technics. Writing also is stressed. Music is taught each six days on a regular rotation plan in all six sections. In the afternoon the sections switch: the seventh grade teacher has eighth grade pupils for a two-hour block while the eighth grade teacher takes over the seventh grade pupils for the same period.

Through the careful selection of staff members, it has been possible to enrich greatly the over-all curriculum.

Three teachers act as seventh grade sponsors and three as eighth grade sponsors. We are operating a partner the exception of the hour period when these groups meet physical education teachers. All seventh grade teachers

Seventh grade pupils are being introduced to the internal combustion engine as a part of their industrial arts program. No lack of atten-

tion is being evidenced herel



Eighth graders in homeroom plan a marionette play for semi - weekly assembly showing. Homemaking room is at left.





Junior high glee club in regular rehearsal. Grades 7, 8 and 9 are represented.

In the field of science the student is permitted a choice from the areas of industrial arts, home economics, or general science.

Flexibility of class periods as to time has permitted seventh and eighth grade pupils to participate in the senior high school band and a beginner's band. Each of the six sections is also represented by one member on the student council of the senior high school.

MORE DIVERSIFIED PROGRAM

Time is no longer such a problem. Longer periods with the students participating in a more diversified program present greater opportunity for the instructor to observe individual and class tendencies, not only in the manipulation of subject matter but in the all-important areas of group planning and committee work. Citizenship instruction becomes a more natural process as it is applied to group and committee work, our teachers have been finding out.

Flexible planning and correlation of subject matter lead to a fuller learning process. A social studies class may include group discussion, a written report as to how the problem will be studied, or conclusions, and an art or musical program for additional enrichment and interest. Thus we see a learning process includes the basic theme of social studies correlated with English, music and art.

Club activities include glee club, which meets three 40 minute periods each week; training in operation of visual aid equipment three 40 minute periods each week, and 4-H Club, which meets once every other week.

Students not choosing these activities participate in art, supervised library reading, or the community-school beautification project of landscaping our school grounds. This project is sponsored by the Garden Club of Apopka. Club members have drawn the plans, obtained the plants, and are supervising the planting, which is done by the pupils. Thus the opportunity of school-community teamwork is a working reality to all those concerned.

Our program provides two assembly periods each week. One is for the seventh and eighth grade pupils. This permits these younger boys and girls an orientation period of planning and participating in assembly programs. This year's theme deals with all of the "ships" leading to citizenship. These programs are planned by the homeroom groups, three in a row. The fourth assembly includes an outside speaker, preferably a former graduate of Apopka High School who is known to the group.

For the second weekly assembly we join the senior high school.

BORED PUPIL NOW EXTINCT

Our homeroom period each week is in charge of pupil officers and committees elected by the group. This gives training in followership to designated leadership, which was chosen by the group. The theme of these programs coincides with the assembly theme.

This may sound somewhat like a three-ring circus, but we can assure you that some very important things are already obvious. Bored pupils are fast becoming extinct. Teachers must be well prepared, enthusiastic and on their toes in order to supervise this type of program. Also at the conclusion of our first six-week period academic averages were as good as, and in many instances better than, those at like periods in previous years.

The administrator treads a PERILOUS PATH between



School Board and Professional Staff

S URELY one of the most significant problems in public school administration today is the establishment of a structure that will help to further the democratic idealism that has been discussed so widely by educators in the last two or three decades.

The concept that schools should help to preserve and to further the democratic way of life has universal acceptance, or almost universal acceptance, and in addition, parochial devotion from vast numbers of administrators, teachers and lay citizens.

Yet the theory of democratic administration presents an odd paradox. There seems to be agreement on direction but considerable disagreement on how to reach goals. Few areas in education reflect so much confusion and so many popular misconceptions. Autocratic leaders at the present time disguise their dominant behavior characteristics under the mantle of democratic administration. Teachers voice deep-seated convictions concerning rights, but they say little about responsibilities. Listening to staff members expound upon dues with little thought to duties encourages one

to believe that many teachers are confusing anarchy with democracy. Administrators, teachers and citizens have been more responsive than responsible to the democratic theory of human relationships. One important cause for this cloud of obfuscation is the structure of public school administration; it starts people in confusion and leads them into even greater confusion.

When one looks back on the democratic social theory of education, a question keeps emerging into consciousness: Why was structure pushed into the background? Structure was the primary issue in the early stages of the democratic movement. Education leaders in the Thirties bemoaned the fact that our administrative heritage was of dubious parentage; that it had descended from the army and big business. They railed against the linestaff type of organization because it

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Professor of Education Michigan State College was militaristic and autocratic in its pattern of operation. In the Thirties many firmly believed that flags would be unfurled and battles fought over proposed changes in the line-staff type of organization.

The battles didn't materialize. What, happened to this live issue in education is an interesting question for speculation. Discussion on structure did not fade away; it stopped. Educators sharply changed direction. They became eloquently silent on structure and began to talk about the democratic behavior of administrators and teachers. The tender and devout love of the individual man for his fellow men was the theme and point of departure for much of the research and writing from 1930 to 1940. Educators said over and over again that desirable acts of human relations fundamentally must spring from a deep-seated love of mankind.

This emphasis was needed; it was in the right direction. The thoughts and facts expressed about democratic relationships are enduring contributions, perhaps the most significant contributions of educators in this decade. No

one should infer that the new direction was devoid of ideas. On the contrary, the movement brought forth much fruitful research. Significant advancement was achieved in implementing democratic emotionalism with democratic action programs. Some of the most promising research still is in progress in such areas as pupilteacher planning, group processes, socio-metrics, and the many different aspects of group dynamics.

But much of the development in democratic relationships is still academic in essential character. The process seems to work better on paper than in real community situations. It is the thesis of this presentation that the cart has been placed before the horse. The prevailing structure has shaped all administrative ideas, both new and old, into a rather rigid and fixed pattern of operation. Educators have been pouring new wine into old bottles. Like a stream seeking the bed on which it can best travel, democratic ideas and ideals have been pressed into a channel of activity that flows along a path held within the boundaries of the administrative structure under which it must function.

One of the crucial and critical points in structure is in the area of policy-making. The popular concept is that the board of education should formulate the policies and that the administrator should execute the policies. At first glance, this logic seems sound. It appears to be sound because no sharp distinction usually is drawn between the act of formulating and the act of adoption. In the minds of many people the terms are synonymous, or at least they seem to shade into each other as far as practical purposes are concerned.

STAFF SHOULD ORIGINATE

That the board of education should adopt policies is a principle seldom, if ever, questioned by those who believe in democratic administration. Who should formulate policies is quite a different matter. When the board of education loosely endorses the policies formulated by the administrator, it means, in many instances, that the administrator is both determining and executing the policies of the school. Determining policies and executing policies, in addition to making recommendations for promotion and demotion of staff members, surely are practices more characteristic of autocratic than of democratic methods.

The position advanced in this presentation is that the final policies should be formulated by the staff and accepted or rejected by the board of education. This in no way should be construed to mean that the board of education should be a rubber stamp for the faculty. Quite the contrary should be true. The board of education might reject far more policies than it accepts. The staff members, in some instances, might be kept so busy reformulating policies that they would seem to have little time for anything else.

The lines of responsibility should be sharply defined—the staff should formulate policies, and the board of education should either accept or reiect them.

Such a method of operation is not a radical departure from present practices. Many administrators today are recommending to boards of education only those policies that have been endorsed by school patrons and staff members.

START WHERE PEOPLE ARE

Why many administrators operate in this manner is easy to understand. In the first place, evolving programs with others provides a natural outlet for the social and intellectual energies of genuinely democratic citizens. In the second place, the better administrators realize that the policies the staff members believe in are the policies that they are loval to in their daily behavior. Staff members execute only those policies they understand. Understanding, as a rule, is preceded by discussion. There has to be participation before there can be genuine cooperation. Administrators must start where people are; there is no other place to start to achieve effective results

If the administrator gets too far ahead of his teachers and community, he may find that he is in another community. In brief, our better administrators recognize that the democratic way is both the expedient and the efficient method of moving ahead with new and different educational programs.

IF THEY MEAN BUSINESS

If administrators are acting upon policies evolved by the staff, why is there a problem in structure? There are problems because administrators operate under their own self-imposed rules rather than under the rules agreed

upon by the board of education. The two sets of rules are logically incompatible. The board of education expects the administrator to perform under the line-staff system of operation, while the faculty expects the administrator to function under a democractic system of administration. Even the most tactful and diplomatic administrators find themselves walking a precarious path between these two groups. When strife develops, some administrators huddle around the board of education, others identify themselves with the staff, while still others try to straddle the chasm between the two camps. Many administrators today find themselves isolated and alone, possessing the trust and confidence of neither the faculty nor the board of education.

If educators really believe in democratic administration, they should effect a structure that will place responsibility with the job to be done. Many teachers and administrators are trying to escape their responsibilities at the present time. Teachers are blaming the administrators and administrators are blaming the teachers for reactionary and inappropriate educational programs. Responsibility is sobering. People weigh the possible consequences of proposed plans much more carefully when they are held accountable for their actions.

The structure that is needed is one that sharply defines the task for which each person is accountable. Just as society in general needs laws to protect and to free people, so does school administration need clear-cut rules to protect and to free the administrator, teachers, members of the board of education, and other lay citizens in the community. People need to know on what side of the educational highway to drive, how fast they may go, and how far they may be permitted to travel.

LINE OF DEMARCATION

Boards of education not only should be permitted but should be encouraged to participate in policy formulation. The point at issue is that professional personnel be responsible for bringing the best research and thinking to bear on the particular policy under consideration.

To put this another way, the burden for formulation should be with the professional staff and the responsibility for acceptance should rest with the board of education.



TRANSPORTATION: A basis for distributing state funds

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ALTHOUGH financial support of pupil transportation costs has long been recognized by students of school finance as an important state responsibility, the methods of distribution employed in several states are not based upon sound statistical technics, and in other states there is no state support for transportation costs as such, either through earmarked funds or through weighted measures in a foundation program.

In South Dakota* the problem of obtaining adequate funds for pupil transportation is one of many financial headaches plaguing school officials. Inefficient district organization, lack of adequate state support and unsound methods of distributing the support that is available, and crippling statutory and constitutional limitations on the ability of local districts to raise revenues are among the major causes of distress. Considerable research and public enlightenment will have to be brought to bear on these problems in the near future.

FINDINGS ARE TENTATIVE

A study designed to provide a sound method of distributing state funds for pupil transportation in South Dakota was undertaken early in 1951. The state legislature had just passed a permissive school district reorganization law, the success of which will depend in large measure upon finding an answer to the transportation problem. The study was handicapped by the absence of uniform or complete accounting for transportation costs. It was possible to obtain usable data from 46 school systems in South Dakota; therefore, findings are considered to be only tentative, pending substantiation or modification by further research based upon an analysis of costs in all districts transporting pupils.

After the literature concerning variables affecting transportation costs was

coulind standards for valid and object

studied, standards for valid and objective measures of transportation need were established. The relationship between the cost of transportation in the 46 South Dakota districts and a number of possible factors was then determined. The factors were:

 Density: pupils per square mile served by school buses.

2. Linear density: pupils per mile of bus route.

Road conditions: paved, oiled, graveled and dirt.

Sparsity: dwelling-to-school distances.

5. Number of pupils transported. The first factor, density, has been found to be one of the most reliable criteria upon which to predict transportation costs. However, a correlation of only -. 4876 was found to exist between density and cost in the South Dakota districts. The doubtful significance of this relationship might be explained by the tendency toward uniformity of South Dakota's districts with regard to density. It can be shown mathematically that the dispersion of values for the independent variable must be comparatively large to yield a significant correlation. Density, therefore, was rejected as an index for

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predicting transportation costs in South Dakota.

Linear density was likewise rejected after a correlation coefficient of —.5622 was found to exist between this factor and cost. Mathematical reasoning similar to that discussed previously could also be used here.

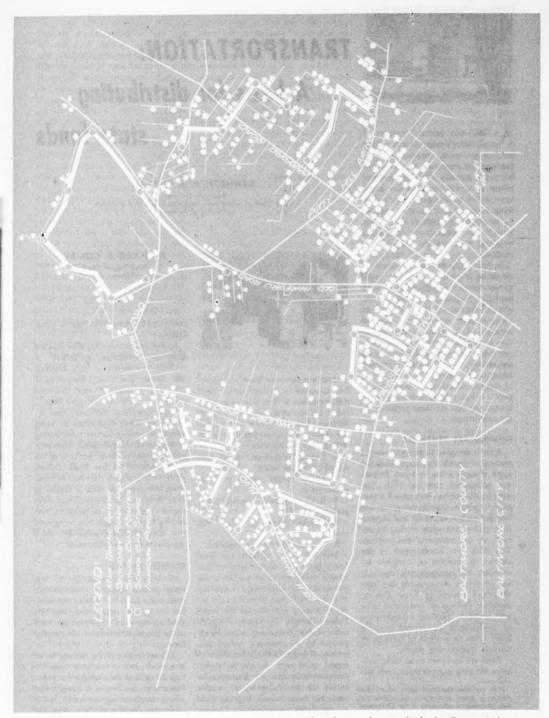
Road conditions also have been regarded by many authorities as being among the major factors contributing to the cost of transportation. However, since approximately 80 per cent of the roads involved in the South Dakota study were graveled, the effect of roads upon transportation need is similar in most districts. Road conditions were therefore rejected as an index for predicting costs, although it is recognized that road conditions could become a significant factor in the future.

SPARSITY FACTOR

A high relationship, .8459, was found to exist between transportation costs and a factor combining the number of pupils transported and the dwelling-to-school distances for each of the pupils, referred to as the sparsity factor.

The acceptance of the sparsity factor as a valid index of cost rests upon the hypothesis that the transported population does not live in a straight line (for example, along one road), but is uniformly distributed throughout the area served by buses. Evidence is avail-

^{*}At the time the study upon which this article is based was made, Mr. McIntyre was professor of education at the University of South Dakota, and Mr. Combs was a graduate student at that institution.



Spot map (turn the page) showing locations of pupils in two residential areas who attend school in Towson, Md.

able to make this hypothesis tenable, including a correlation of .8741 which was found to exist between the sparsity factor and miles of bus route.

After plotting the selected variables and observing the nature of the dispersion, a "least squares regression line" of the type Yp=AX+B was used. After the parameters A and B are evaluated, the resulting equation is \overline{Sp} =7.23R+1696.74 where \overline{Sp} , the dependent variable, is the total cost in dollars, and R, the independent variable, is the measure of sparsity (sum of the dwelling-to-school distances of the pupils). This formula is proposed as a measure of transportation need in South Dakota.

An alternative formula, adding a second independent variable, total miles of bus route (Q), could be used. A coefficient of correlation of .8667

was found to exist between this factor and cost. The multiple correlation coefficient when S (cost) was correlated with Q (total miles of bus routes) and R (sum of dwelling-to-school distances) was found to be .8657. A prediction equation based on these data would be $\bar{S}p=39.67Q+3.21R+417.39$.

Both formulas are usable, the computations required to predict transportation cost being quite simple. Especially important is the fact that the data employed are objective in nature and not subject to local manipulation. Some state control and supervision would be required in order to eliminate inefficiency arising from poor district organization in using state funds for transportation in South Dakota. When a large proportion of the pupils, especially on the secondary

school level, live outside the district in which they attend school, the problem of overlapping routes is complicated. Competition among high school districts for tuition pupils, already a major problem, could be increased if unrestricted transportation funds were to be provided.

It is hoped that the investigation discussed here will serve to emphasize the need in several states for (1) better financial accounting for transportation costs, (2) more state support for transportation as well as other needs, and (3) a sounder method of distributing state funds than is now used. Better accounting for transportation costs would provide the data necessary for a reexamination of relationships between cost and those factors that might be expected to have a significant bearing on cost.

TRANSPORTATION: a metropolitan district

increases bus safety, economy and efficiency

EARL D. HEATH

BECAUSE of increased traffic congestion in metropolitan districts, it is becoming extremely difficult to achieve a pupil transportation operation that is safe, efficient and economical. An example of how detailed planning in laying out school bus routes in a metropolitan district resulted in such an operation is outlined here.

A detailed map of the area served by a particular school was drawn to scale. Next, a list of the names and addresses of pupils residing within this area was compiled by streets. Later, each individual pupil was plotted on this map. The next step was to establish school bus stops at points within reasonable walking distances of each of the pupils.

In addition, an attempt was made to eliminate the necessity for pupils' having to cross a main traffic artery in walking to the school bus stop to which they had been assigned. Care was taken to establish these stops, whenever possible, on secondary routes of travel.

This procedure proved sound in that it served a twofold purpose. First,

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the pupils could wait for, board or be
discharged from a school bus without
encountering the increased traffic hazloads to each of

ards usually present along main routes

of travel. Second, traffic could move

over the main arterial routes with fewer interruptions.

An additional related problem that had to be met and dealt with effectively was that of controlling pupils who boarded buses other than those to which they had been assigned. In a situation in which several hundred pupils were transported from a relatively small area, this problem could not be overlooked. At first tickets were assigned to the pupils, and only those presenting their tickets to the driver of the bus to which they had been assigned were admitted. This procedure proved satisfactory in controlling the number of pupils riding the buses. However, it proved unsatisfactory in that traffic was detained a considerable period of time while the driver checked the tickets.

In an attempt to solve the problem, it was decided to assign near-capacity loads to each of the school buses, to have only one bus stop at each of the assigned stops, to have all "early" buses cover the same general area at approximately the same time and to have later buses cover completely different areas. This procedure removed the necessity for checking tickets, removed much of the temptation from those pupils who had ridden buses to which they had not been assigned, and made for increased efficiency in the operation.

The result of such planning manifested itself in the increased amount of work each bus was able to perform without a substantial increase in the length of the school day for the pupils, in the reduction of the number of pedestrian hazards ordinarily faced by the pupils on their way to and from a school bus stop, and in improved attitudes toward pupil transportation on the part of the motoring public.

CHALK DUST





BEWARE THE IDES!

AS THE IDES of March approach with stealthy tread, a few of the more fortunate school administrators will once more engage in the annual struggle with Form 1040-A, Bureau of Internal Revenue. After they have battled with all the other 1039 Forms in an effort to obtain permission to buy nonexistent school materials, the innocent little 1040-A ought not to cause any severe wounds.

It should be pointed out, however, that there are a number of occupational hazards in the daily life of a school executive for which no deductions are permissible.

Despite the evident injustice, school teachers are not allowed to claim deductions for: (1) depreciation of mentality resulting from overcrowded classes, (2) cost of insurance against assault and battery by residents whose property adjoins the school playground, (3) socks or stockings ruined by obsolete school furniture, (4) or any other kind of socks, physical or mental, (5) cost of tickets (unused) for Parent-Teacher functions, (6) financial support of school picnic when it rains, (7) excess headache or sleeping pills, (8) rent of doghouse as temporary domicile, (9) divorce proceedings against a Board of Education, or (10) gambling losses sustained in looking for another job.

ALICE IN WONDERLAND

XVII-Burning the Books

"MY FRIENDS and fellow travelers, if any," orated the Gryphon, leering at the audience of unattached crusaders who had gathered around to get warm, "the time has come to burn all the textbooks in the schools."

"What's the matter with the textbooks?" inquired the Walrus, whose chief complaint against schoolbooks was that they didn't have any snappy pictures.

"Textbooks are subversive, they are communistic, they are left-handed," shouted the Gryphon, "and besides they cost too much."

"Which ones are the worst?" queried the Walrus. This impertinent and irrelevant question irritated the Gryphon no end. Quickly he turned to his assistant, who was busily stoking up a few extra bonfires for emergencies. "What books do I mean?" he said sourly.

The assistant grabbed the nearest book from a pile of Congressional Records and other free advertising. It was a battered 1910 telephone directory.

"A perfect example of depravity," shouted the Gryphon, quickly throwing the book into a near-by furnace. "You would not believe, my friends, that this volume occupies an important place on the desk of every school administrator. You would scarcely suspect that the schoolmaster swears by and at it. Yet it is

full of the names of dissenters and those from foreign communities. It stresses places no one ever heard of."

The crusaders and a few others who had come to toast marshmallows were visibly impressed. "Let's burn all the arithmetics, too" shouted a young zealot.

"You are right, my child," exhorted the Gryphon.
"Arithmetics are the most deceptive of all. They claim one and one are two but one and one are not always two because one often gets mad and quits at the unauthorized use of his name in our fund appeals."

The crowd, growing restless under this philosophical approach, began to yell for bigger and better fires.

"Have you actually read all these awful books?" asked Alice, reasonably enough.

The Gryphon was enraged at the suggestion. "Of course not, you ignoramus," he shouted. "My time is too valuable and I only read my own releases in the newspapers. My assistant can give you the facts, however."

"Yah-h-h," sniggered the assistant. "Any book with a red cover which is read is red, ain't it?"

"What about the dictionary?" said Alice.

"It should be burned," snarled the Gryphon. "It contains some form of the word communism 20 times, to say nothing of [he consulted his notes] community and compensation."

With a whoop and a holler the crowd dispersed to ransack the nearest school.

"Shades of Hitler and Mussolini," groaned the Gryphon, bursting into tears of rage and vexation. "I forgot to condemn the World Almanac and the Britannica."

ROLL CALL

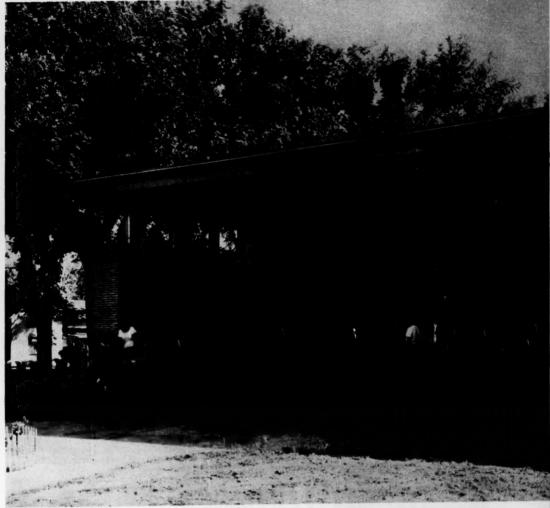
When Superintendent Oberholtzer bangs the gavel down... and the good folk of St. Louis breathe a prayer ... from far and near, from there and here, the brethren come to town . . . when the clan begins to gather, I'll be there.

When the City of the Angels dons its most alluring smile . . . provided I can wangle railroad fare . . . I shall pack my best pajamas, my hyphens and my commas . . . with a briefcase full of speeches, I'll be there

When the beans of staid old Boston start a-bubbling in the pot . . . and the rich old Boston accent fills the air . . . I shall grab my dictionary and with proper fuss and flurry . . . with the codfish and the lobsters, I'll be there.

I may miss the ocean breezes that *broze* me yesteryear . . . I may miss the most salubrious ocean air . . . I may miss the bathing beauties and the other Boardwalk cuties . . . but when the roll is called out yonder, I'll be there.

SCHOOLHOUSE PLANNING



PROPHETSTOWN GRADE SCHOOL

THREE

ELEMENTARY

SCHOOLS

Prophetstown School, Prophetstown, Ill.

Kaune Grade School, Santa Fe, N.M.

North Ward School, McCook, Neb.



Prophetstown Grade School, Prophetstown, III.

DESIGNED FOR SOCIAL LIVING

RAYMOND A. ORPUT

Reymond A. Orput & Associates Architect-Engineer Rockford, III.



THE old schoolhouse in Prophetstown, Ill., was a substantial two-story brick veneer building but, as is true with all such schools of the period in which it was built, it was totally unsuited to modern grade school requirements. This was first recognized by the Mothers' Club of Prophetstown, and a movement was soon on foot to replace the old structure.

The problem that presented itself was to keep the old school in operation during construction of the new building and at the same time to fit the new building on an irregular, very confining lot (the same lot on which the old school stood). This was done



by first removing a two-room wing of the old structure and then building in front of the remaining portion of the old. Attractive lawn space was maintained by moving the street walls to the curb line, thus serving two purposes: providing a continuous paved unloading space for children coming to school in cars and at the same time giving a satisfactory setback treatment

for landscaping.

The new building is a combination of Roman (fireclay) and standard French gray brick. An interesting characteristic of the school is the use of structural columns in relation to the design. These columns serve as a roof support and are cast concrete, wrapped in stainless steel; they are inexpensive, yet decorative. The school flagpole too is so designed that it becomes an object of structural interest, beauty and utility. Too, the planting areas give warmth to an institutional atmosphere.

There are two main entrances to the school: one leads to the primary and administrative units, the other leads to the junior high school section and serves as the public entrance for the gymnasium. The doors out of the primary rooms lead directly to the playgrounds. Hours of participation in play are staggered so that a maximum use of the small play area is gained.

The Prophetstown school uses the eight-grade system with the additional kindergarten grade, and it introduces junior high school subjects in general shop facilities, music and general sci-

Features of interest in the school include the special location of age groups and the separate entrances and exits for the kindergarten and the first through fourth grades. There are special toilet facilities for the kindergarten and first grade pupils.

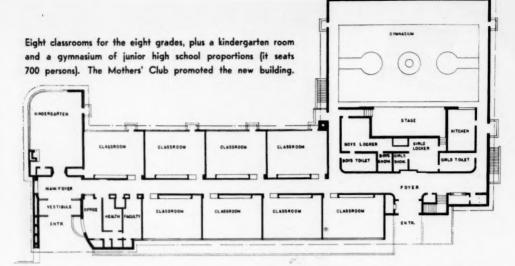
The kindergarten has a southeast exposure; directional glass block has been used to control glare.

The administrative group includes a health room and a faculty room. The fifth through eighth grades are



School office (above) commands a clear view of the school corridor and also of the main entrance, permitting ample supervision. The trophy case (below) is in the gymnasium entrance vestibule. Both case and ceiling have indirect lighting. Striated plywood is used on either side of the trophy case to create an artistic effect.





in the front of the building and are served by the main corridors. The building contains a gymnasium of junior high school size with a seating capacity of 700.

Prophetstown classrooms have many facets in educational values, being designed to teach social living as well Interior of classroom, illustrating pleasing psychological effect on the pupils of having an unobstructed view of the outside world. The building faces north and so requires no shades at the windows.

as to achieve academic excellence. They provide the opportunity for probing the minds of pupils individually or collectively for any and all special inclinations and for the nurturing and furthering of such tendencies. Each classroom contains work and project areas as well as a library area.



The NATION'S SCHOOLS

FOR the last five years there has been a steady stream of families moving to Santa Fe, N.M., which is only 25 miles from the Atomic Energy Commission's research center at Los Alamos. School building needs have become acute, and slow increases in property valuations have made any extensive building at one time impossible. Then, too, it would be almost impossible to project the needs of the city for any length of time with any degree of accuracy.

In the spring of 1948 the board of education faced the problem of furnishing school rooms in a booming residential area far from any other grade school and with numerous traffic and safety problems. Since a new elementary school (Grades 1 to 6) was needed in the area, a lot with a beautiful Sangre de Cristo Mountain backdrop was selected. The architect was given only \$107,000 with which to complete the job. It seemed a hopeless task, but the board of education, the superintendent, and the architect finally came up with plans for a 15 room building with a multipurpose room. However, the initial project was to include only seven rooms and the multipurpose room. The contract was let for a total price of \$106,580.55.

By September 1949 the school population had already grown to such an extent that the additional wing was needed. Another bond issue was voted, and a contract was let on May 9, 1950, for an additional eight-room wing at a total cost of \$75,965. The new addition is now completed and occupied. The present enrollment is 450 in the 15 rooms. The cost was \$182,545.55, or \$8.17 per square foot.

The building was constructed with two wings on a line with each other. Each wing discharges into a lobby at the center of the building. The multipurpose room leads off the lobby to the school at right angles. Classrooms



KAUNE ELEMENTARY SCHOOL SANTA FE. N.M.

Inexpensive but Adequate

T. C. BIRD rintendent of Schools Santa Fe, N.M.

JOHN GAW MEEM Meem, Zehner, Holien & Associates, Architects Santa Fe, N.M.

discharge into a corridor from each

The size of the average classroom is 750 square feet.

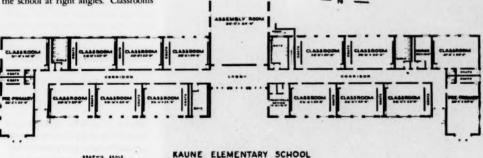
The building was constructed of concrete block, brick and plaster. Interior walls are hollow tile, plastered. The building is Spanish Colonial style, in keeping with Santa Fe architecture.

No cafeteria was needed because all the children live within walking distance of their homes.

The multipurpose room is approximately 50 by 40 feet. It is not an audi-

torium but an assembly room large enough to accommodate approximately 400 persons. Black roller window shades were provided so that the room may be used for audio-visual work. There is a raised platform stage with dressing rooms and storage. Stage dimensions are 12 feet 6 inches by 22 feet. The room may be used for the presentation of plays or as a small gymnasium.

Floors in the school are mottled gray-green asphalt tile. The plaster ceilings are white. Corridor walls are green; auditorium walls, rose beige. The walls of east rooms are peach and the walls of west rooms, green.



SANTA RE. NEW MEXICO

Vol. 49, No. 3, March 1952





NORTH WARD ELEMENTARY SCHOOL, McCOOK, NEB.

This school is SIMPLE, ECONOMICAL, FUNCTIONAL

RALPH G. BROOKS
Superintendent of Schools
McCook, Neb.

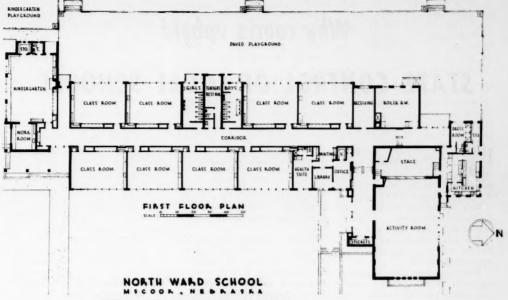


N EITHER the "dream school" of feature articles nor an example of ultra-modernity, the new North Ward School at McCook, Neb., is amazingly simple. No gingerbread, no dead ends, no lost space, and no unused facilities—all this means the building is purely functional. A place for everything and everything in its place.

From the beautiful multipurpose room to the bright, commodious and complete kindergarten, there is nothing to which the visitor can point and say, "What's that for?" Rather, the visitor is overwhelmed by the convenience and adequacy of all of the appointments and is more likely to exclaim, "Why didn't someone think of that before?"

The last remark may be elicited by the viewing of any one of a number of things: the tables that fold out of the wall, complete with benches on which to sit; outside exits and entrances to the boys' and girls' toilets, which eliminate back traffic through the corridors; the steel fence around the blacktop kindergarten playground; the drive-in porticoed entrance to enable pupils to avoid rain and snow when they are brought by car; the outside unloading door to the storeroom, which keeps the corridors free from freight; the kitchen with automatic dishwasher, garbage disposal unit, and steam table; the health room a few steps from the principal's office; the intercommunication system which keeps the principal in touch with all of the rooms of the block-long building; the individual heat control for each room which directs the amount of fresh air brought in from outside over heated radiators and disperses it over the room, or the work benches that extend completely across one end of each classroom and are equipped with sinks.

Interior of activity room, looking toward the stage. This room serves as auditorium, gymnasium, playroom, music room, cafeteria, broadcasting room, and banquet hall.



JOSEPH W. RADOTINSKY, KANSAS CITY, KAN., ARCHITECT

Classroom doorways, recessed so that they do not obstruct the corridors when opened, alternate or are staggered with the doors on the other side of the corridor. This ensures privacy in each room and tends to eliminate considerable noise. Asphalt tile floors and acoustical tile ceilings help attain an atmosphere of quiet studiousness.

Glazed tile wainscoting, pumice stone walls painted in natural-finish red oak trim, varied pastel tints, green chalkboards, fluorescent lighting and a solid, full-length wall of window space make each room highly and pleasantly attractive. All of this in coloring and decoration is simplicity personified, yet guests marvel at the beauty of the effect.

The multipurpose room, worth special mention perhaps, lives up to its name. An auditorium with a stage, a banquet hall, a music classroom, a gymnasium and a playroom, a cafeteria, a radio broadcasting studio, and a meeting place for school groups and school related organizations, this room indeed has a multiplicity of uses. The outside entrance to this room has a distinctive approach which is charac-

A view of the kindergarten, showing the project area in the rear. There are two modes of entry to the room: through the main front door or from the playground side.

terized by a geometrically designed concrete patio. While this sounds imposing, it is really only an ingenious twist which turns the commonplace into the exceptional. The North Ward School demonstrates how easily the purely utilitarian can also be attractively artistic.

Only where rugged wear and long life are required are the materials expensive. Steel treads on the concrete steps, copper eaves and downspouts, and glazed tile corridors, these are provided to ensure the permanent economy and usefulness of the plant.

The school has eight classrooms, a kindergarten, an office, a health room, a library, a storeroom, a furnace room, a multipurpose room, a kitchen, and a full-length blacktop playground. It will accommodate 275 pupils. The cost was \$227,000., \$10.27 per square foot, or 60 cents per cubic foot.

The building is McCook's answer to increased pupil enrollment. It is an addition, not a replacement.



if it sees fit; it may delegate admin- its plans completely whenever it deems pattern or framework in which it

istrative authority to already existing it necessary to do so. Local schools deems it wise for local schools to op-

Why courts uphold

STATE CONTROL OF LOCAL SCHOOLS

PEOPLE are frequently heard to complain that the legislature is enentirely unjustified or unauthorized in passing laws affecting the administration of local schools. They are critical of laws that concern such matters as curriculum prescriptions, minimum salaries, and tenure. They look upon such acts as examples of state interference in the administration of a purely local function.

Why is the state justified in passing legislation of this sort? To answer this question one must understand the function of public education, as defined by the courts. Frequently courts, in ruling on matters affecting public schools and public education, find it necessary to define the place of the school in the American social order and in governmental structure.

NOT PURELY LOCAL

A study of court decisions reveals the fact that our higher courts have developed a theory of public education which conceives of the school as a social agency and governmental institution. While these words are familiar to most school administrators, their significance and their implications are not generally understood. Too often administrators and teachers look upon the school as a purely local or municipal institution of a charitable or philanthropic nature, created for the purpose of benefiting individual pupils and their parents. While they may not express this so tersely, or even admit it, still it is implied in many of the decisions they make and the actions they take. Nothing, however, could be further from reality.

Our courts are in agreement in holding that education is a function of the state and that our public schools are not local but state institutions. In arriving at their concept of public education, they reason that the state is sovereign in all matters except those over which it has yielded its sovereignty to the federal government and

LEE O. GARBER

Associate Professor of Education University of Pennsylvania

that education is not such a matter. (The words "schools" and "education" do not appear in our federal constitu-

Therefore, the power to create, administer, control and finance a system of public schools is one reserved to each individual state. This power or authority is assumed by the state because education is essential to the attainment of the highest ends of the state-the guaranteeing and securing of the good order, peace and well-being of the state. In other words, education is a state function because it is an essential instrument in furthering the ends of the state. Education is essential to the safety, the welfare and the very existence of the state itselfit is essential to the economic, the political, and the social well-being of the state. In brief, the state supports schools for the welfare of the state.

FOR SOCIETY AS A WHOLE

It should be evident, then, that the school is not a philanthropic or charitable agency created for the benefit of individual pupils or parents. Needless to say, it is of benefit to individuals, but it is important to note the point of emphasis. The state maintains and supports schools for the purpose of furthering the ends of the state which is, in our form of government, all of us taken together in our collective capacity. While the state must necessarily educate individuals, it educates them not for philanthropic reasons primarily but for the sake of society as a whole; so the school must be conceived of as a service to the individual for the benefit of society.

If this seems an inconsequential distinction, one needs only to ask himself this question, "Could one 'sell' the idea of added taxes for public schools to the wealthy taxpayer, the

childless voter, or the large impersonal corporation on the ground schools are charitable institutions created to benefit the individual as easily as he could on the ground they are instruments of the state, created for guaranteeing the existence of a democratic social order?" The answer is obvious

At this point someone is bound to ask, "Is this not a totalitarian concept of public education?" The answer is both "Yes" and "No." Before I attempt a specific answer, it should be pointed out that while all types of governments, not just democracies, will accept this concept that education is a function of the state, still it has different meanings for different types of government. This difference is clearly manifested in the applications of the concept. In a totalitarian form of government sovereignty rests in the hands of a single individual or a small ruling group. Here, the school becomes an instrument or agency for furthering the ends of the individual or clique. In our form of government, on the other hand, where sovereignty resides in the people who, collectively, constitute the state, the school becomes the agency of the people for furthering the ends of the people-of society.

STATE IS SUPREME

Still, it will be argued that while this is a fine theory, actually the schools are local institutions administered, controlled and supported by local units. It is granted that local school districts are given a great deal of autonomy, but this authority is not inherent in the local community. Its source is the state. In education the state is supreme. In the absence of constitutional restrictions the legislature has complete power over education. It may enact any law affecting education and the schools that it wishes. It may retain whatever authority it desires, and it may delegate the remainder. It may create any sort of machinery it desires. It may administer the schools itself,

if it sees fit; it may delegate administrative authority to already existing governmental units such as cities, townships and counties, or it may create separate administrative units such as school districts and clothe them with the authority to establish, administer and finance schools within their borders.

In any case, the state is the source of power over education, and its authority is supreme. Even though it delegates some of its authority over education, it retains supervisory control. Thus, it may require agencies to which it delegates control to exercise the control delegated. Having set up machinery to operate the schools and having delegated its authority, the state is not stopped from changing

its plans completely whenever it deems it necessary to do so. Local schools are thus seen to be state institutions.

The implications of this concept of education as a function of the state are evident. Teachers are state employes, school property is state property—held in trust for the state by the local school authorities—and school money is state money. These concepts are common to all courts and form the starting point for much of their reasoning on questions of educational import.

From this it is apparent that the state is justified in passing statutes such as minimum salary and tenure laws that affect local schools. In so doing it is furthering a primary interest of the state and is setting the pattern or framework in which it deems it wise for local schools to operate. The actions of the state in all such matters are paramount, and local administrative units are but agents of the state created for the purpose of assisting the state in furthering its own ends.

This legal concept of the place of public schools and public education in the social order is basic and should be understood by all professional educators. It must be considered as the starting point for any thinking concerning the purpose, function, philosophy and also curriculum of public education. Without it teachers and administrators cannot solve the problems that face them; nor can they properly interpret the schools to the public.

Teachers rate their professional growth as

BASIS FOR SALARY INCREASE

NOT a teacher-rating procedure but an evaluation process of teachers' growth, both professionally and in "mere" fields of human relationships, earns that annual increment for teachers in the Community Unit District Four schools at Champaign, Ill.

Work of a Midwestern elementary school principal as a sales clerk at Macy's in New York City, research on coal for the Illinois State Geological Survey by a chemistry teacher, field work throughout the state as a surveying engineer by a mathematics teacher, work as a secretary in a large Indianapolis concern by a commercial teacher, work in a summer camp by a guidance counselor—these and other types of work activity all count toward the credits required if teachers in the Champaign system are to earn their annual increments.

EVALUATED BY COMMITTEE

Travel, research, article or textbook writing, and college study also count when the evaluation committee of the local teachers' association, the Cham-

ALICE TOWNSEND BARLOW

Teacher, Senior High School Champaign, Ill.

paign Education Association, meets to go over the forms filled out early each fall by instructors enumerating those items they feel rate credit.

In 1944 this committee was set up under the original salary schedule provisions worked out by a committee of teachers. The board of education then approved such evaluation and incorporated the idea into the board's rules and regulations, with a committee of teachers elected by the association and the superintendent working together on the committee.

ACCEPTED BY BOARD

"The fact that such criteria originated in a democratic manner and the fact that our evaluation committee itself works in a democratic manner, keeping the confidence at all times of the faculty members, has led to its prestige among our staff today," E. H. Mellon, the Champaign superintendent, points out.

"It is well for all teachers to know that the tenure law has two sides to it. One side is that the teacher cannot be dismissed without just reason; the other side is that the board of education must have evidence of continued professional growth. Our school board accepts the work of the evaluation committee and its reports on teachers as evidence of that professional growth."

WARNED OF DEFICIENCIES

When the system was first set up in 1944, every teacher then employed by the Champaign schools had his first basic five-year period noted on his card as 1944-49. As new teachers joined the staff, their basic periods began with the beginning dates of their employment.

During such periods, if their work has been satisfactory enough for them to continue in the system, these teachers have been getting their annual increment, but if they have not been furnishing evidence of college credits earned, work, travel or other experiences that fit into the committee's allowable types of credit, they are notified by the chairman at least a year before the end of their basic periods that they lack a certain number of credits.

More than mere recognition of certain types of activities contributing to professional growth, the system does have a disciplinary effect. In fact, in these days, not to get that increment apparently is discipline enough.

Last spring, for the first time, three teachers were notified that they lacked several semester hours' credit for their five-year period. They promptly talked the matter over with their principals and supervisors and discussed what would be the best type of credits for them to seek. They attended summer school, and before they received their first paychecks in the fall the credits they earned were noted on their cards in the superintendent's office.

ONLY A FEW LAGGARDS

"Considering the large number of teachers we have, we feel that is a very small percentage," Supt. Mellon said. "Of course, our salary schedule is set up to encourage professional growth, and more than half of our staff members now have master's degrees. This evaluation system gets them to continue widening their knowledge."

While college and university credits earned each year are transcribed by the superintendent's secretary onto the cards every teacher in the system has in the file, the committee is especially concerned with evaluating travel, work experience, and other items offered for credit—and translating these into the equivalent of college semester hours.

How many credits are necessary? What counts how much? How many credits may be obtained for different types of activity?

Six credits is the answer to the first question—that is the minimum to be earned and reported during the fiveyear period.

All six, to be sure, may be obtained for study at any accredited college or university. Some study during summer vacations; some take extension work, and others whose schedules permit may take one graduate unit per semester in late afternoon seminars at the near-by University of Illinois campus.

Some "cut-down" academic credits are awarded for auditing courses the teachers deem of special interest or importance to them in their subjectmatter or other fields.

But if no scholastic credits are offered the total can include only two for travel, two for work, and two for writing, research, workshops or special projects.

Two weeks of travel rate one credit, and many teachers offer much more than this, but, according to the rules, only two credits can be allowed for travel during each basic term.

And a trip to Aunt Hetty's at Thanksgiving or a 200 mile jaunt to Uncle Joe's over the week end won't count. There must be some evidence that the travel is extended enough to indicate that the person offering it for credit has added to his or her knowledge through this experience.

Several Champaign teachers are inveterate travelers, and two of them, after a six weeks' jaunt together to South America the first summer of their basic period, offered that travel for credit—and were allowed two travel credits. That didn't seem quite enough, but they let the matter pass.

When each of them made separate but summer long trips the following year, one going on another foreign jaunt and the other on a 5700 mile tour of the United States, they again noted their travels on the printed forms available in each school office.

Soon after the fall session opened, the evaluation committee met, turned down the new travel credits offered by these teachers and sent them back with the notation "Not accepted" and a brief explanation.

That happened soon after the system started. Today all are aware that after their two travel credits have been earned it is then up to them to get in other fields the four more necessary credits.

THESE STANDARDS ARE USED

Here are the standards the committee uses to evaluate various offer-

 Educational travel is evaluated at the rate of one-half hour's credit for each week of travel, but no more than two credits may be earned in this way in any one five-year period.

 Work experience is evaluated at the rate of one-half hour's credit for each week of work. The type of work must be described. Two hours' credit only may be allowed for work experience in a five-year period.

3. Study of professional books is evaluated at the rate of one-half hour's

credit for each approved book reviewed in a written report submitted to the committee. Books must be in addition to those read to meet the Reading Circle requirements. A limit of two hours' credit may be earned in this manner in a five-year period.

4. Authorship of a book or a magazine article is evaluated at the rate of one credit for every 40 hours' work spent on the project. A limit of two hours' credit may be earned in this manner in a five-year period.

 Educational experimentation or research is evaluated at the rate of one credit for every 40 hours of work spent on the project. A limit of two hours' credit may be earned in this manner in a five-year period.

6. Auditing a college course is evaluated at the rate of one-fourth the credit earned by those taking the course for university credit, whether it be on the graduate or undergraduate level. The teacher must have audited at least two-thirds of the class meetings. A limit of two hours' credit may be earned by auditing courses during a five-year period.

7. Workshops and clinics are evaluated at the rate of one-half credit for 15 hours of work. A limit of two hours' credit may be earned in this manner in a five-year period.

WORK EXPERIENCE RATED HIGH

Belief that work experience in any field, and not necessarily one related to their teaching subject, is valuable to all teachers in making them better rounded persons led the committee to decide on professional credit for such

"My time in New York City as a sales clerk in one of the biggest department stores was certainly a revelation to me," one of the elementary principals said. "I certainly learned a lot about human nature and how to get along with all types of people!"

Mrs. Lucille Dobson, chairman of the committee this year, pointed out that in the final type of classification for credit, nearly every case is individual and has to be decided on its

For example, several may offer evidence of completion of worth-while workshops. Yet some do not get credit for them, and others do—get credit, that is, toward the six required over the five-year period if a teacher is to continue getting that annual increment.

Here's how that works. If the workshop is held during the school year and

EVALUATION OF PROFESSIONAL GROWTH

TYPE	DATE OF WORK	AMOUNT
a. Work Experience	 June-Aug. 1950 -	1
b. Educational travel	 July 1951	1
c. Professional reading	 	•
d. Authorship of articles	 Jan. 1949	1
e. Educational research	 - TOP	-
f. Auditing college courses	 	-
g. Other Educ Paych	 1947-48	1
NAME	Total	4

One of the forms used in the schools of Champaign, Ill., for evaluating teachers.

if the board hires a substitute for the teacher and pays essential, or merely travel, expenses, that workshop is assumed to be part of the teacher's regular duties. If, however, the workshop is held during a vacation period and the teacher attends of his own volition and at his own expense, that is deemed "beyond his necessary duty" and is rewarded by professional credit. How much credit is given will depend on the length of time spent at the workshop, with consideration of the amount of work involved for the individual attending.

Research projects, article and textbook writing necessarily involve speculation and discussion by the evaluation committee about the amount of time and effort put into the work.

TRAVEL CREDIT MOST POPULAR

Among those who have received credit in this field are a junior high instructor, co-author of an elementary Spanish text; a dramatics instructor who has written for several national educational journals, and others.

Travel credit is the popular one. This last summer one Champaign teacher spent seven weeks at business education conferences in Europe, while others studied and traveled in the far West and some in New England colleges and universities, thus getting both travel and academic credit. Several enjoyed trips to the southern seaboard and to several provinces of Canada; one went to 14 of the United States' beautiful national parks; another to every state park and also to nearly every point of special historical interest in Illinois.

Most reluctant to report are those persons who actually perform work during the summer, whether that work is in their own field, or some other type. But the committee, the superintendent of schools, and the board of education believe these tasks are valuable in rounding out the personality of a teacher, as well as making him or her seem "more human" to the community's citizens.

Some teach, locally or elsewhere, with several members of the teaching staff and also administrators and special education instructors giving college courses. This, of course, gives "work credits."

Supervising crews of teen-age corn detasselers is still another work experience offered; most of the industrial and vocational education teachers work in their own trades; one history teacher goes all over the state testing for corn-borers; several return each summer to regular and important positions in local business concerns.

WHO MAKES UP COMMITTEE?

Elected for two-year terms, two members of the evaluation committee represent the elementary teachers, two the junior high, and two the senior high staff. Each group elects its own members by nomination from the floor, in separate meetings, although elected as representing the Champaign Education Association. Voting is sometimes by ballot, sometimes by show of hands as the groups decide.

Terms are staggered so that each year three persons are elected, one from each of the groups represented. Reelections are frequent. Serving as an ex-officio member, the superintendent has no more power than any other member, according to Dr. Mellon. All of the group's recommendations and all of its decisions are made on the basis of the power invested in the committee by the board of education to evaluate credit other than college credit.

The superintendent has exercised no veto power and would give special sanction only if the group made some recommendation which was administrative in character. Working harmoniously, the superintendent and committee have yet to disagree.

The group meets on call of the chairman and/or at the suggestion of the superintendent. First of its meetings each year is usually called in October or November after teachers have been advised through the superintendent's weekly newsletter that teachers may now petition for deserved credit on the forms available for noting each of the types of credit.

Frequent meetings are held for a time, and if there are questions about some of the offerings, a member will be assigned to talk over the credits requested with the teacher concerned. This is done usually when information given about a research or other project has been insufficient. All information given the committee, either written or oral, is held in strictest confidence.

ONE DRAWBACK

Admittedly there is a drawback to this system—when a teacher reaches the maximum allowed under the salary schedule and no further increment is expected, the present system does not require that teacher to "keep growing."

"We have had no failure of teachers to receive an increment," Dr. Mellon said. "And while there is no particular punishment for teachers at the maximum of the salary schedule who do not obtain the six semester hours credit in the five-year period, we find that most of our teachers are going ahead and making their professional growth, even though they don't have to do so."

Stating both his belief and that of the board, Supt. Mellon concludes: "Our teachers have faith in the committee, which acts on a strictly professional basis, and keeps all knowledge gained from going over the offerings in strictest confidence. As far as I know, there has been no ill will caused by the decisions made by the committee, which is teacher elected and doing a good job."



Wherever they go

BOOKS MAKE FRIENDS

MARGARET C. SCOGGIN

Cheirman, International Relations Committee School, Children's and Young People's Librarians American Library Association



Left: Manila school children scan U.S. books with real delight. Foot of page: Students of the Helsinki Lyceum (boys high school) open book package. "The books brought America right into the classroom," wrote Eino Cederberg, rector of the Finnish secondary school.

U NESCO-CARE launched an experiment in international understanding last spring when it established the Children's Book Fund, which makes it possible for an individual or group to send carefully chosen American children's books to schools, libraries and other institutions throughout the world that serve children. Only upon such personal contact can lasting peace be built.

The plan developed in response to demands from teachers, librarians and parents all over the country. "Why," they asked, "when books, especially our beautiful picture books, can carry friendship to children of other countries, do we neglect this most important factor in our struggle for peace?" The National Congress of Parents and Teachers, the Association for Childhood International, and the American Library Association agreed to sponsor a project for sending books overseas.

Books to be included in the packages were selected by the international relations committee of the American Library Association's division of libraries for children and young people. The selections were made from the entire field of children's and young people's books currently in print. There are 10 groups of books, five consisting of picture books for younger children, and the other five consisting of picture books and selections for older children and those who are learning English.

Books were chosen to aid in accomplishing the special objectives of each bookshelf:

 To provide outstanding American books whose pictures make them interesting to children of elementary school age in any country, even though the text is in a language that the children do not read.

2. To provide outstanding American books that will be interesting for adolescents who read English as a second language. Mature concepts and simple and straightforward presentation were major characteristics for inclusion in this group of books. In this program, as in other CARE

The NATION'S SCHOOLS

American children's books are being distributed to the boys of Don Orione Orphanage, Rome. Miss Scoggin, author of the article, is making the distribution. The books are gifts from American school groups through the UNESCO CARE children's fund; the first of them were sent out last spring.

programs, the amount donated for each package covers cost of the books, of sturdy cartons for overseas shipment, of transportation, and of handling and promotion of the program.

The first of the colorful packages started their travels last spring. The funds that paid for them were raised by schools, clubs, classes and library groups in every way the ingenuity of the youngsters and their advisers could

suggest. Helena Schriner, a public school teacher at Flint, Mich., and Laura Steese, director of work with children in Flint's public library, cooperated to explain to Miss Schriner's sixth grade class just what the book program was. A team of boys and a team of girls organized a paper sale and promoted a candy sale to make enough money for three book packages. They voted to send the books to a school in Greece known to one of their classmates who had just come to America. This was not the end of the project, because the sixth graders are now eager for pen pals and are awaiting letters from the

Greek children.

In Rutland, Vt., high school boys and girls in the International Relations Club made plans for a three-day campaign during Brotherhood Week in February and followed that by a citywide campaign at the beginning of March. They talked to adult groups, wrote letters to the newspapers, sent out news releases, and broadcast over the local radio stations to tell all citizens about the UNESCO-CARE Children's Book Fund.

The value of these efforts is double, for not only do children abroad learn something about us but also our own youngsters are given an opportunity to do something constructive for their country and the world.

How are these packages received by children in other parts of the world? With astonishment, delight and touching gratitude for the friendly thought which the books represent—if I may use my own experience as proof.

Some four hundred boys live and study at the Don Orione Orphanage in Rome under the direction of Don Domenico Troiani, who is assisted by other Salesian Fathers and Brothers. It is a well organized place. There is even a small library for each class. However, books are costly, there is never enough money, and the school's books are now battered and worn.

This was the school in which, in June, I helped with the distribution of 10 packages—the complete list—sent by the Danville, Ill., branch of the Association for Childhood Education. The boys were on their best behavior as they sat in rows in their assembly room. Their eyes lighted up when they saw the display of books on a long table. After I told them, through the CARE representative who spoke Italian, that these books were a gift to them from America, that the books were to be handed to them for

their use, and that their friends in America wanted to know them and hear from them, I was literally swamped by enthusiastic boys aged 6 to 16. Through all their murmurings came the delight that someone had actually thought enough of them to send such books and to want their letters.

Reports from CARE representatives elsewhere emphasize the enthusiastic response to the Children's Book Fund packages.

From Finland: "It was a delight to see the eagerness with which the children reached for the books as they were unpacked. . . . The teachers praised the books in no uncertain terms and were grateful for the valuable aid these books offered in teaching the English language and life in the United States."

From Japan, in the Japanese press after books were distributed to a secondary school: "Principal Kamoshida told Mr. Gory (CARE mission chief, Japan) that Minoto School, a demonstration school, was especially happy to receive the books because, though each of its 1078 pupils is required to study English for three years, the school has only 101 English books for general reading."

There is no limit to the number of packages that can be sent throughout the world. And since the books are to be used by the children, not displayed behind glass doors, they are, as they should be, expendable and must frequently be replaced. Here is an opportunity for everyone to help build a better world.



Vol. 49, No. 3, March 1952

Replanning vastly improves

LIBRARY

WILLIAM M. STAERKEL

Principal, Senior High School El Dorado, Kan.

THE library of our high school at El Dorado, Kan., as it appeared at the beginning of the 1950 school year, was a long, narrow room with white walls and a brown acoustical tile ceiling. A high counter separated the reading room from the stacks, and the charging desk was placed well back and out of sight of the students.

The weaknesses of this type of room are easily seen. Placed behind a formidable, counter-like barrier, books become distant and remote to the student. The position of the counter made it necessary for the librarian to supervise the reading room from that point and leave the charging desk to an assistant. The unattractiveness of the long and narrow room was emphasized by the complete lack of color. In short, the library, rather than encouraging students to make use of books, had the unwanted effect of separating them from reading material.

The library as it exists today is no longer dull and colorless. The side walls have been painted yellow, the ceiling white, and the end wall a chocolate brown. Woodwork has been

color. The effective use of color gives the illusion that the room is shorter and wider than it really is. The rich brown serves to bring the end wall forward toward the observer, and the white ceiling and yellow walls tend to widen the room. A small niche in the west wall was also painted brown further to break up the room and destroy its long, tunnel-like appearance. In the center of the room, where we plan to create an informal and comfortably furnished reading area, the walls are painted an olive green, introducing a third wall color and completing the color plan.

The use of such a radical color scheme in the library required a certain amount of daring and was done with full knowledge that more subdued decorating is generally advocated. However, after one year of use it can be said that in actual practice the use of bright and stimulating colors in the library is just as successful as is their use in the classroom. Close observation of students at work has detected no evidence of distraction, and our experience indicates that as long as proper attention is given to the reflection factors of different colors. more decorative daring can be used in the high school library than was heretofore thought advisable.

Another important change was made when the counters were removed and the books were placed along the walls in accessible and inviting positions. A badly needed storage room was created by placing shelves across an unused portion of the library, and the back of the shelves, along with the discarded counters, provided the room with additional shelving space. A repair room was made by placing three of the double-sided shelves to form a small enclosed area.

The charging desk was moved to a position directly opposite the main entrance. From there the librarian can supervise the reading room. The desk's new location also makes it possible for the student to check out books easily and quickly. We plan to place comfortable chairs and lounges near the charging desk.

Results are already proving the success of the new arrangement and proving also that much can be done to overcome the discomforts of poor architectural planning.

BEFORE REMODELING painted to correspond with the wall AFTER REMODELING Storeroom Junior College Library



the stork

new resident

and

FLORIDA SCHOOLS

Cover of a public information leaflet put out by Florida department.

MANY of the problems of Florida education may be resolved with money, building materials, and school buses or through simple state and local planning, but the problems that are involved in providing teachers whose qualifications have been attested by state certification may not be so

easily solved.

Of course, the problem of providing qualified teachers for public education is nationwide in its scope, but in Florida it is most acute. Florida, growing at a rate not approached by any state east of the Mississippi River, not only is faced with problems of teacher replacement but also must find teachers for the new thousands of additional pupils who annually enter Florida schools. The number of teachers needed is seriously affected by a variety of factors.

As elsewhere, it is necessary in Florida to find replacements for many who marry, carry on professional study, retire, migrate to other states, or withdraw from the profession to enter business, industry and government service. Serious illness and death also take their annual toll and necessitate teacher replacement.

More than one-third of the new teachers, however, are employed because of mounting school enrollments.

When it comes to EMPLOYING

the OUT-OF-STATE TEACHERS

THOMAS D. BAILEY

State Superintendent of Public Instruction, Florida

The increase in pupil enrollment last year over the previous year of record was 31,649 pupils. If we assume that a new teacher was required for each 30 additional pupils, it will be readily appreciated that last year Florida was required to add approximately 1060 new teachers because of enrollment increases, and the total number of new teachers required exceeded 3000.

It has long been recognized by those having the responsibility for obtaining public school teachers that Florida is heavily dependent on other states for

its supply.

The extent of Florida's dependence for trained teachers is shown in estimates and studies that have been made from time to time. Figures prepared in the office of Dr. Vynce A. Hines, coordinator of research in the college of education, University of Florida, Gainesville, show that more than 3000 new teachers will be needed each year from 1952 to 1958 to meet the needs resulting from increased births, net in-migration to the state, retirements and withdrawals, and a limited expansion of the school program.

MUCH MIGRATION IN SOUTHEAST

Latest available figures compiled by Dr. Hines indicated that Florida institutions of higher learning probably could supply 1300 graduates to teach in Florida schools in September of 1950. It is probable that this number was less in 1951, and it may decline further. We may infer from these figures that during the next few years, from 1700 to 2000 teachers must be obtained annually from outside the state if Florida schools are to be adequately staffed by trained personnel.

The situation is similarly pictured in a study of the migration of teachers

in a group of Southeastern states made in 1948 at the University of Florida by Alice P. McCartha. Pointing out that Florida's population is the most migratory in the Southeast, Dr. Mc-Cartha reported that on the basis of data for the years 1945-48 Florida received about 70 per cent of her new teachers each year from out of the state. In the year studied, an average of 2800 new teachers annually received certificates, and of these 2000 were educated in other states.

This large volume of new teachers from out of the state each year presents serious problems that involve the out-of-state teachers themselves, the employing officials of the county school systems, and the state depart-

ment of education.

Through high standards for teacher certification, Florida has endeavored over the years, and especially since the passage of the Foundation Program law in 1947, to maintain and raise the quality of its teaching staff. Certification regulations have been adopted by the state board of education on the recommendations of the Teacher Education Advisory Council composed of representatives of the state department, Florida institutions of higher learning, and the public schools.

Teachers who receive their training in other states in few cases have been made aware of Florida requirements for certification. Thus it often happens that a teacher who is needed in Florida, who wants to come to Florida, who may have been trained in one of the best institutions in the nation, and who may have several years of successful experience does not meet the requirements for full and unrestricted certification in Florida. If he is to teach in Florida, such a teacher must

accept a provisional or temporary certificate until he can complete the necessary college work for full certification. Fortunately, in most cases, the salary he will receive will not be affected provided he meets requirements for full certification within a reasonable time. Nevertheless, teachers who hold regular certification for teaching in other states are often reluctant to accept provisional or temporary certification in Florida.

The fault does not lie in unnecessarily high requirements for certification in Florida or in low standards in other states. Florida must continue to insist on high qualification for its new teachers if the quality of its teaching staff is to be maintained and improved.

CHIEF DIFFICULTY

The difficulty grows chiefly out of lack of agreement among states and teacher education institutions as to what is essential for the certification of teachers. For example, some teacher education programs require of prospective teachers only three semester hours of observation and practice teaching; Florida requires six. Is Florida's requirement too high or is the requirement of three semester hours too low? Whatever the right answer is, there is likely to be an irksome problem for a new teacher coming to Florida and for a county superintendent who needs a teacher. The state department of education, which must administer the regulations, is, of course, caught in cross fire.

At present there is little unanimity among the colleges and schools of education as to what should embody the education of a teacher. The problem would be relatively simpler if professional study were permitted only after completion of a four-year course in liberal arts.

Since professional as well as liberal elements are included in the undergraduate requirements for prospective teachers, there are sharp differences of opinion with respect to curriculum content in schools and colleges that have been charged with responsibility for developing teacher understandings, competencies and skills.

It has been urged sometimes that the federal government, preferably through the Office of Education, be empowered to prescribe curricular standards and to issue teaching certificates that would have a common validity in all states. A weakness of these proposals from the point of view of the states is that the prescription of teacher qualifications is a fundamental responsibility. Few states would agree to transfer such authority to the federal government.

A variation of this idea has had more recent expression in the demand for a national agency for accreditation of colleges and schools of education. It is too early to predict the future of this movement, but it is safe to say that the idea will be accepted enthusiastically in some quarters and roundly condemned in others. Certainly the establishment of national accreditation for the work of those engaged in the education of teachers impinges on a live issue in educational circles. More and more educational groups and agencies are giving serious attention to the problem.

Among other educational organizations the National Council of Chief State School Officers has become interested in the matter of interstate agreement with respect to teacher qualifications. In a workshop sponsored by the National Council at New Orleans in November 1951 the problem was given intensive study. Earlier in the year the Southern States Work Conference studied the problem in an effort to work out a regional solution.

Both groups reached the tentative conclusion that the problem could be solved through cooperative development of an acceptable teacher education program and through reciprocal recognition of reaching certificates among the states.

It is doubtful that recognition of out-of-state certificates on a reciprocal basis will be feasible for years to come. Such recognition would assume an equivalency of certificates which does not, and only with extreme difficulty could, exist except in terms of agreement among the states through agencies competent to authorize and enforce the terms of such agreements.

REGIONAL STANDARDS POSSIBLE

Perhaps the most promising course of action for the present would be for groups of neighboring states through their several departments of education and institutions of higher learning to work out a common core of principles that could be accepted as a base for certification in each of the participating states.

It is immediately practicable certainly for a number of the states through their educational agencies and institutions to agree upon common standards of certification. This does not and probably should not mean that every state would issue or validate all of the certificates that might be approved under such an interstate agreement.

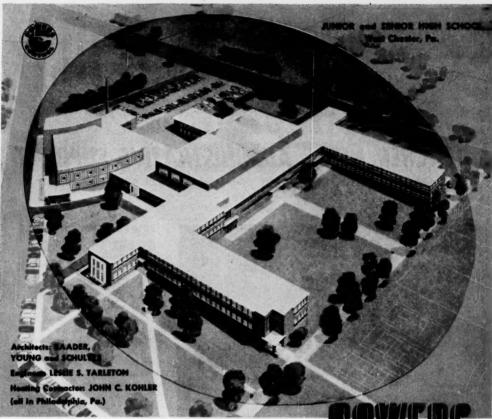
A blanket prescription of standards for certification that would have uniform application in all of the states probably would not be feasible. Common standards, however, may be erected under a number of classifications representing different levels of teacher education. A state might accept all of the categories or accept only those that would not impair existing standards for education of teachers. For example, States A and B might restrict certificates to those who had completed four or five years of college work and not recognize or issue certificates based upon lower levels of training, although other states might accept standards for certification based upon less than college graduation.

After acceptable common standards have been developed, wherever possible they should be promulgated through the rule-making authority of the state boards of education or that of the corresponding agency in each state. It would be unwise to have the certification regulations embodied in the statutes. An authoritative set of regulations is highly desirable, but not an inflexible set such as would be created by statutory enactment.

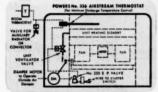
Changes in regulations will be required periodically and the regulations should be so instituted that changes may be made simultaneously by competent boards who have an understanding of the purposes and principles involved in the common standards.

Probably an advisory committee, composed of membership from each of the participating states, should be formed to keep the certification standards under continuing appraisal. Such a committee should be empowered to recommend changes to the chief state school officers who, in turn, would evaluate proposals for change and formulate common recommendations to their several boards respecting changes that are considered necessary or desirable.

In any event the development of common standards for teacher education and certification presents a challenge to professional thinking, and early solution to the problems involved in the challenge would be welcomed in Florida.



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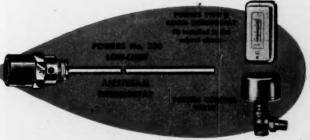
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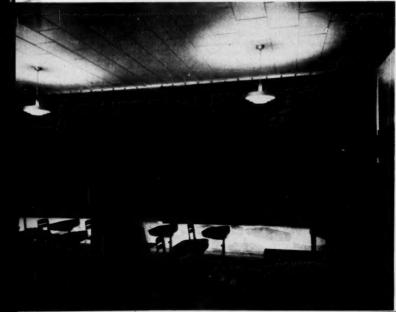
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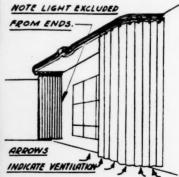
Audio-Visual Director Beverly Hills Unified School District Beverly Hills, Calif.

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Six unified school districts of Southern California have made this check; furthermore, they have developed comprehensive evaluative criteria whereby other school systems can look at their programs practically and comprehensively. Findings of the survey establish three factors as requisites of an audio-visual instructional program.

The first requisite is proper provision for classroom use of equipment





The two photographs show the method of window darkening used in a Beverly Hills classroom. The diagram gives an idea of the curtain track setup.

The NATION'S SCHOOLS

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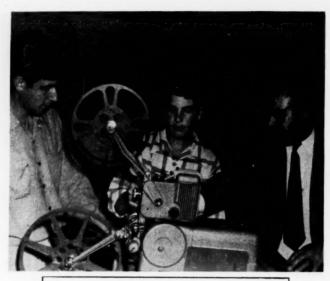
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The school coordinator at the Burbank Unified Schools, Burbank, Calif., is training student operators. A copy of the projectionist's license issued by the Beverly Hills schools is also shown. The overprint is in red ink.

and materials: light control (or darkening), ventilation, good acoustical conditions, and sufficient electrical outlets. Light control, ventilation and acoustics are most efficiently and economically provided by draperies of the type recommended by the audiovisual division of the California State Department of Education. These draperies are made of heavy windbreaker material which comes in several colors. They are suspended from tracks in the ceiling and are set 12 inches from the windows of the outside walls, and are hung so that from 18 to 24 inches of space is left between them and the floor.

These draperies are in two sections.

One part extends from the front of
the classroom and the other extends
from the rear, the front curtains over-

lapping the rear portion for from 1 to 2 feet when they are pulled together. This device provides positive light control and allows ample ventilation because windows can be left open and air can come through the open space. The cloth constitutes a soft surface for sound waves. (Acoustical ceiling material is also recommended.)

Draperies cost approximately \$125 per classroom and last for years. Substitute methods cost \$60 or less in some cases, but maintenance problems defeat both economy and teaching effort. Despite all claims for screens of the daylight type or roller curtain substitutes, I do not recommend them. The first sacrifices color and delineation in projection and often strains the eyes; the second sacrifices ventilation.

The cost of draperies is not out of

line with other school costs. Think how much a storage closet for the average classroom costs; yet we provide closets because we believe they are necessary. Do we believe good audiovisual instruction is necessary? Is a classroom that is efficient for audiovisual instruction as important as a closet?

Actual teaching practice gives the answers. Satisfied, enthusiastic teachers, well prepared students, and increased use of materials and equipment stress the importance of good classroom provisions as no other evidence can. The audio-visual programs of districts that have followed such a plan gradually but steadily over a period of years have shown healthy growth. In contrast, systems which have not met basic classroom needs or have tried makeshift, cheaper substitutes have had discouraging results.

The second requirement for a successful program is a coordinator in each school. The Southern California survey showed that it was the efficiency and service afforded at this point that was often the deciding factor in a teacher's continued use of the audio-visual services. If the teacher can immediately put his hands on information about materials, if ordering is simple, and if equipment and materials are ready to use at the proper time, the program clicks and his efforts are worth while.

The administrator, in looking at the program for which he is responsible, might ask himself or his audio-visual director these questions: Does each school have a specified person whom teachers and students can contact for equipment and materials, for placing orders, and for looking over catalogs? Does this person have time to keep the catalogs, equipment and materials in order? Does this school system provide a simple channel for communication between the teacher and the audio-visual center?

COORDINATOR MAY BE NEEDED

If the answer to these questions is "No," then the recommended solution is to designate a teacher as the audiovisual coordinator within each school. To give him time for this activity, he can be freed from some other work, such as playground, assembly or cafeteria duty. (The coordinator needs from 20 to 30 minutes per day for a 20 teacher school.) Oftentimes principals do not recognize the importance of a coordinator, but the fact



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that the superIntendent feels strongly on this vital point will emphasize its importance to the principals.

There is one final note on coordination. This function is not the principal's, and if he attempts the work, the program will suffer. If catalogs are kept in his office and if he is busy with parents, teachers cannot get necessary information. New or shy teachers are often reluctant to disturb their superior officers or to show signs of ignorance about teaching technics. If the principal is busy with administrative duties or is called away, help is unavailable. It is better to keep coordination decentralized and to help an interested teacher grow. The future audio-visual director may be in training as the coordinator in one of your schools.

The final factor in the successful audio-visual program involves maintenance of equipment and materials.

I remember well the remark of one school principal when audio-visual services were first being established in the Beverly Hills Unified School District. The remark was: "I will never use such things in a school program. We have never used one film that there has not been an interruption." Today, that principal is an enthusiastic booster of audio-visual aids. He has forgotten the days of breakdowns and interruptions and expects not one person but all the members of his teaching staff to use these types of materials well.

This reversal of opinion stems from the word "maintenance."

In the old days projectors were serviced only when there was a breakdown. Today, servicing is periodicat Christmas, Easter, summer vacation, and in an emergency. Equipment is checked during the short vacation periods and given a complete overhaul during the summer. This service is true economy. Now, because adjustments are made before damages become serious, major repairs are seldom necessary. At the present time, several pre-war projectors are still doing yeoman duty alongside their modern counterparts, and they are not liabilities or unwanted machines. Their mechanical efficiency and acoustical effectiveness are excellent, or they would have been traded in on new machines. Even more important, teachers are happy with and confident of the equipment they use.

The same is true of materials on call from audio-visual centers. Examination after each use and immediate repair of sprocket tears, damage or erasures of smudges make materials wanted and acceptable.

QUESTIONS TO BE ANSWERED

Why not start the new year by taking a look at your audio-visual program? What are teachers saying? What are students saying? Is your teaching staff facing the problem of classroom use of equipment squarely, or is it sidestepping the issue? Do circulation figures indicate healthy growth, or are there gaps between the school and the audio-visual center? Is your equipment in constant use and in good repair, or is it in some closet gathering dust? Go to the classroom where the lessons are being learned to see and hear for yourself.

In summary, three factors are the essence of your audio-visual instructional building. They are (1) provision for use of equipment in the classroom situation, (2) coordination between the school and the audio-visual center, and (3) a program of equipment and materials maintenance.

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Quoting from the recent survey of visual aid equipment in U. S. schools: "Impressive as is the total of schools owning Keystone Tachistoscopes, even more striking is the number actually USING them."

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Complete vs. Self-Selected Lunches nutritionally compared

MARGARET B. DREISBACH

School Lunch and Institution Research Adviser Bureau of Human Nutrition and Home Economics U.S. Department of Agriculture

TYPE A lunches furnish a larger proportion of pupils with complete meals which more nearly meet recommended nutritional allowances, at lower food cost and lower selling price per lunch than self-selected lunches furnish.

This is the conclusion suggested by findings in a study of lunch programs in 16 paired schools. The study was made by the Bureau of Human Nutrition and Home Economics in cooperation with the Production and Marketing Administration, which is responsible for administering the National School Lunch Program.

As background for the study I should like to mention the objectives of the bureau's school lunch research and some of the earlier work that preceded this study.

FOUR POINTS COVERED

The four broad areas studied are:

1. The nutritive value of school meals served to the pupils.

2. The acceptance by the pupils of foods and lunches served.

School feeding management as it relates to nutritional value.

4. Ways of preparing foods for the school lunch and recipe development. In 1945 a conference of leaders in

child nutrition, pediatrics, public health, institution management, and education considered the need for school lunch nutrition and management studies.

During the course of studies in management it was found that some schools serving complete or Type A lunches also offered extra food items for self-selection by the pupils. The desirability of serving both Type A lunches and other foods from which lunches could be self-selected was studied in five high schools in one state. In these schools main dishes and vegetables served in the Type A lunches were not available to the pupils who preferred to choose individual items. Pupils taking Type A lunches paid more but received more food. Calculations and chemical analyses showed higher nutritive values for the Type A lunches in most cases.

This study led to a more extensive study of Type A and self-selected lunches in 16 paired schools, the results of which are now ready for publication. Fourteen high schools and two elementary schools in different regions of the country were selected with the cooperation of the Production and Marketing Administration and the state departments of education. Eight of the schools were participating in the National School Lunch Program and so were serving complete meals on a nonprofit basis to meet Type A requirements for reimbursement. Paired with each Type A lunch school was one not participating in the national program and offering a variety of foods from which pupils chose lunches. Four pairs were in agricultural and four in industrial areas.

The lunch trays of all pupils going through the serving line on one day were checked to ascertain the foods in each lunch. This provided information on lunches taken by almost 8000 pupils in the 16 schools. A higher percentage of pupils attending schools serving Type A lunches bought their entire lunch than did pupils attending schools in which the lunches were served on a self-selected basis.

In the latter schools a higher percentage either bought food to eat with lunches they brought from home or ate lunch elsewhere. Some schools serving Type A lunches offered extra foods which were bought in addition to the Type A lunch or were chosen in preference to it. Because some pupils took only the extra foods and because some refused one or more foods included in the Type A menu only 89 per cent of the pupils buying their entire lunch in the Type A lunch schools had foods meeting the full Type A requirements.

The cost to the pupil and the nutritive values of many self-selected lunches were much lower than those of Type A lunches. Often they consisted of only one sandwich. Some "plate lunch" combinations offered by the self-selected lunch schools fell below desirable allowances because the serv-

ings were small.

However, in the schools offering self-selected lunches 22 per cent of the pupils chose foods similar to a Type A lunch although at an average cost to the pupils 17 cents higher than the cost of the average Type A lunch. In the schools serving self-selected lunches some pupils, particularly boys, chose hearty, well balanced lunches having high nutritive values and providing more than 50 per cent of the National Research Council's recommended daily allowances for all nutrients, thus exceeding the 33 per cent usually considered desirable. The menus for these lunches reflected the appeal of traditionally favorite foods and food combinations. For example: (1) roast pork, mashed potatoes and gravy, sliced tomatoes, green beans, rolls, ice cream and milk; (2) boiled ham, potato salad, sliced tomatoes, salmon salad sandwiches, mixed fruit gelatin with whipped cream, chocolate milk; (3) chili con carne with crackers, creamed potatoes, egg salad sandwich, pineapple upside-down cake, ice cream, chocolate milk. The appetites which prompted pupils to choose such meals would not have been fully satisfied by most of the Type A lunches, although a few schools serving the Type A lunch allowed extra bread or an extra sandwich if desired.

In all schools the main dishes were the best single source of protein although most of the meals would not have met the recommended allowances without the service of milk. Frequently main dishes provided the highest values per serving for iron, thiamine and niacin, and in more than half of the Type A lunch schools they

Adapted from a talk at the American School Food Service Association meeting, November 1951.



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Section
Quality Foods

provided the highest caloric values per serving. Milk was the chief source of calcium and riboflavin in both types of schools; vegetables and fruits supplied the highest Vitamin A, and citrus fruits the highest ascorbic acid values.

Some nutrients were lost in the food which pupils left uneaten on their plates. The plate waste for the Type A lunch schools ranged from 4 to 21 per cent and averaged 9 per cent of a total of 5000 pounds of edible food served. In the self-selected lunch schools waste ranged from less than 1 to 10 per cent and averaged 3 per

cent of a total of 4000 pounds of edible food served. In other words, when pupils were allowed to choose their own food from an assortment of items there was relatively less plate waste even when some chose large lunches.

One interesting part of this study was a comparison of the kinds, quantities and source of foods used. During one month the Type A lunch schools purchased and used 12 per cent more food than the self-selected lunch schools. Foods purchased by the government under the program to remove surplus agricultural commodities were

used in both types of lunches, although three of the schools serving self-selected lunches did not use any donated foods. Only Type A lunch schools were eligible to receive certain foods of special nutritive value, such as orange juice and tomatoes purchased by the government from school lunch appropriated funds. The Type A lunch schools used more than 4½ times as many donated foods (vegetables, fruits, butter, nonfat dry milk, dried egg and honey) as the self-selected lunch schools used.

Only very small percentages of frozen foods were used in both Type A and self-selected lunch schools. The schools serving Type A lunches used higher percentages of canned and dried fruit and canned vegetables. They used higher percentages of proteinrich foods; of whole grain or enriched breads, flour and cereals; of butter and fortified margarine; of leafy, green and yellow vegetables; of citrus fruits, tomatoes and raw cabbage; of potatoes and other vegetables and fruits. The Type A lunch schools also used a higher percentage of whole and nonfat dry milk. The schools offering selfselected lunches used a higher percentage of ice cream and also used chocolate milk and soft drinks. None of the Type A lunch schools served either chocolate milk or soft drinks.

TYPE A LUNCH CHEAPER

The food cost to the school for Type A lanches averaged 7½ cents less than the cost for the self-selected lunches similar to the Type A. This was partially accounted for by the greater use of donated foods. Cash reimbursement from the government further reduced the cash outlay for Type A lunches

When the values of donated foods were calculated, prices based on carload lots being used, the estimated value of 1300 pounds of donated foods used on one day in the eight Type A lunch schools ranged from \$8.75 to \$30 per school and totaled \$150. In the eight schools serving self-selected lunches the estimated value of 135 pounds used on one day ranged from \$1 to \$5.50 per school and totaled \$12.

Cash labor costs per day including cash wages and food cost of workers' lunches were higher on the average for Type A lunch schools than for the schools serving self-selected lunches. The highest figure for labor in any school was in a Type A lunch school; the lowest was in a self-selected lunch



THREE WAYS TO BUILD





M-M-M-Menus not Menu\$-\$-\$-\$

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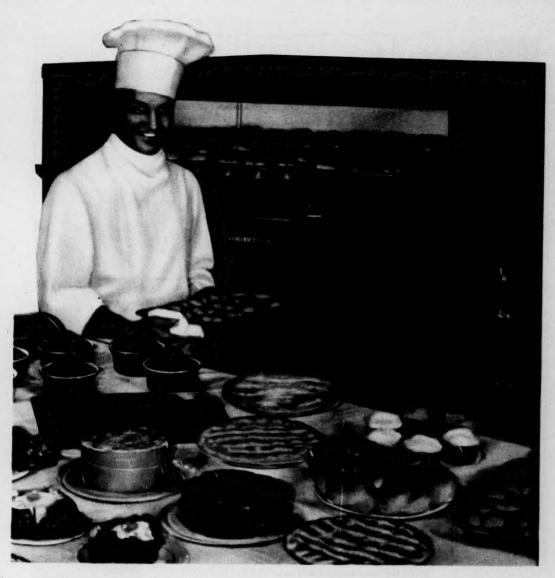
One deck holds as many as 116 Casseroles or equal capacity.

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One deck has capacity for five 25 lb. turkeys or equal capacity.

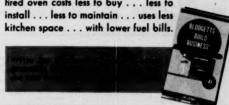


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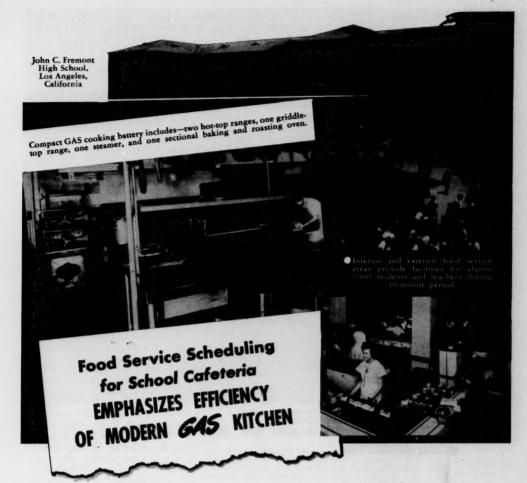
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school, although the workers in the self-selected lunch schools prepared and served more than twice as many menu items as did those in the Type A lunch schools. Possibly the labor requirement was determined by the total quantity of food prepared rather than by the number of menu items. Other factors not dealt with in this study that would affect the labor cost include the rate of pay and efficiency in the use of workers' time.

However, when the food and labor costs were considered as proportions of lunch cost, the food cost constituted two-thirds and labor cost one-third of the daily lunch cost on the average for both types of schools. Most overhead costs were paid by the school board in all cases.

The prices paid by the pupils for Type A lunches were 20 cents in four schools, 25 cents in three, and 25 and 35 cents in another. One school charging 25 cents sold the lunch for 21 cents to younger pupils. Self-selected lunches similar to the Type A were higher in price and ranged from 29 to 52 cents, depending on the prices of the items chosen. The prices paid

by the pupils for the "most frequently chosen" self-selected lunch ranged from 10 to 34 cents. Although many of these lunches sold at prices lower than did the Type A, they usually contained fewer food items and provided less nourishment. The cash reimbursement paid by the government for each Type A lunch did not seem to influence the selling prices, relatively speaking. Three schools charging 25 cents received eight and nine cents. Another charging 25 and 35 cents received three cents.

STUDY RESULTS SUMMARIZED

Findings from these 16 paired schools suggest: 1. The Type A plan furnished a larger proportion of the pupils with complete lunches that more nearly met recommended nutritional allowances, at lower food cost and lower selling price per lunch than did the free-choice system.

The lower selling prices for the Type A lunch seemed to be associated with the higher percentage of pupils participating.

 It was possible for some pupils to obtain self-selected lunches equal to or better than a Type A lunch although at greater cost.

 The appeal of traditionally favorite foods appeared to be an important factor in acceptance.

When pupils were allowed to select their own lunches, less plate waste resulted.

The labor requirement seemed to be determined by the total quantity of food prepared rather than by the number of food items on the menu.

7. Participation in the National School Lunch Program, involving use of donated foods, cash reimbursement, and stipulation of nonprofit lunches, was advantageous financially to the school and to the pupil.

These findings emphasize the importance of adapting the school lunch menu and methods of food preparation to pupils' tastes and adjusting the quantity of foods served to nutritional needs.

With the self-selected lunch system protein-rich main dishes and vegetables need to be made available to all pupils and not limited to "plate" lunches. In the Type A lunch service some free choice would seem to be desirable, such as provision of a limited number of foods for alternate choice within the planned menu; additional items, if offered, should supplement but not replace the Type A lunch.

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Would you like to be in this picture?

This summer 25 boys and girls... the first-prize winners in a nation-wide "Know Your America" contest... will visit historic shrines in such places as New York, Washington, Detroit, Chicago, and Los Angeles. Each of these 25 will invite HIS TEACHER to go with him, along with Mother or Dad, and the family grocer. Will YOU be the teacher?

Why is America great? Children everywhere are preparing their written answers. General Mills will reward the best entries with this all-expense trip. There will be 1,100 other prizes. No purchase of a product is required—no boxtops, no entry blanks. Complete contest rules and prize lists are now available.

However, there is a more worthy goal than inviting children to enter a contest. The broader objective is to stimulate every youngster in America to learn about this land of ours and appreciate it more. To encourage family discussion, General Mills cereal boxes carry thought-provoking statements about the greatness of America. To help teachers motivate pupils in social studies, English, speech, science, and art classes, a series of 10 picture panels and a pamphlet of teaching suggestions have been prepared.

Home discussion has been going on for some time. Contest enthusiasm will run high until the April 21, 1952, deadline. Capitalize on this interest. Order these teaching aids at once!



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ELECTRIC WIRING

CHARLES R. KUGLIN

Chief Mechanical Engineer Childs and Smith, Architects Chicago

> As told to MARY TOMANCIK

FORESIGHT in planning the electrical services for a school building can result in substantial savings in maintenance and operation costs. The instructional program, community uses, and future additions foreseen for a new school all determine how much lighting and what other electrical services will be needed. The best time to make such provisions is while the building is in blueprint form.

A decision to "economize" on materials or to provide only for immediate needs can be expensive in the long run. For example, replacement or extension of wiring after a building is built costs from four to five times the original amount if all conduit and wiring are to be concealed. At the time of construction, the additional cost for extra conduit and wiring is nominal. But if wiring is done after a building is finished, the cost is greater because of the extra expense for cutting into walls, patching plaster, and tearing up the floors.

Even if there are no funds for immediate purchase of a complete intercommunication system, shop equipment, audio-visual equipment, or maintenance machines, it still will be wise to anticipate such purchases and install conduit and outlets at the time of construction. Future electrical requirements also can be calculated, so that proper and adequate wiring can be installed to take the load.

CONSIDER MAINTENANCE

Probably the first thing that will influence operation and maintenance costs during the year is lighting. When fluorescent lighting is used, we favor the recessed or ceiling mounted, low-brightness types of fixtures, without louvers. These can be easily cleaned from the floor—either with a dust mop reserved for that purpose or with a cloth placed over a dust mop. Stems and tops of other types of fixtures also can be dusted in this manner. The louver type requires the use of a ladder and a special wash tank. Failure

to schedule time for cleaning reflectors will mean that lighting efficiency is reduced at least 20 or 25 per cent.

Caution should be used in selecting the low-brightness fixture to be certain that it meets the brightness limitations set up by the Illuminating Engineering Society for classroom fixtures.

If a large number of fixtures are to be maintained, it is economical to set up a program for periodical replacement of lamps and reflector cleaning in order to provide good lighting efficiency at all times. Relamping periods can be determined from lamplife tables published by lamp manufacturers or power companies. One crew can go through the building to relamp, replacing even those lights that still may be burning. Several large industrial plants have set up relamping programs because experience has shown that this method has saved money.

Some lights last about six months, depending upon where they are. The life of a fluorescent lamp depends upon the number of times it is turned off and on. This may vary from 2500 to 8000 hours. Research shows that tube life can be doubled or tripled by leaving these lights on continuously instead of turning them off for short periods. This practice is desirable if the cost for replacing lamps is more than the increased cost for power.

Much of the criticism about fluorescent lighting has resulted from purchase of so-called bargain fixtures that contain inferior and unapproved ballasts and accessories and thus fail after a short period of time.

Purchase of fixtures with instantstart ballasts also can assure low maintenance cost. The ballast is the transformer within the fixture that operates the lamp. It eliminates delay between the time a switch is turned on and the fluorescent tube lights up. Ballasts with an ETL label meet the standards recommended by the Electrical Testing Laboratory for good performance for a long time.

If fixtures of the preheat type are selected, they should have a resettable starter. This type of starter shuts off the lamp when it begins to flicker and can be reset when the lamp is replaced. The starter is a little round device that looks like a battery; usually it is placed near the end of the tube.

A fixture with an instant-start ballast is more expensive, but it pays for itself in a short while by reducing maintenance costs. It eliminates the cost of a separate starter per fixture and also the inconvenience of removing a tube or louvers to replace the

AVOID RADIO INTERFERENCE

It is essential that lamps and ballasts do not cause excessive radio interference. Standard ballasts have some in-built devices to suppress interference on the radio. However, if the problem is serious, a capacitator type of filter can be installed on the fixtures or, in some cases, on the radio device itself. This type will reduce line noise approximately 75 per cent. When almost 100 per cent suppression is desirable, an inductive capacitator type of filter can be installed. These suppression devices may vary in cost from \$2 to \$2.75 per fixture.

Probably the best way to compile a checklist of electrical needs is to study the projected school, area by area:

Classrooms. Foot-candles for ceiling lighting will vary, of course, with tasks to be performed. Critical seeing areas, like the library and sewing, drafting and machine rooms, will require more illumination.

If the chalkboard will be used a great deal, it should have additional lighting. This involves extra switches and spot-type or other kind of lightSMALL-AREA BUILDINGS...

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COMBINATION SCRUBBER-YAC!

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Model 418P applies the cleanser, scrubs, and picks up (damp-dries the floor) — all in one operation! Maintenance men like the convenience of working with this single unit... the thoroughness with which it cleans... and the features that make the machine simple

to operate. It's self-propelled, and has a positive clutch. There are no switches to set for fast or slow—slight pressure of the hand on clutch lever adjusts speed to desired rate. The powerful vac performs efficiently and quietly. (Powder dispenser is optional.) Compactly built, the 418P also serves advantageously in larger buildings for the care of floors in narrow aisles and congested areas.

Finnell makes Scrubber-Vac Machines for small, vast, and intermediate operations, and in self-powered as well as electric models. From this complete line, you can choose the size and model that's exactly right for your job (no need to over-buy or under-buy). It's also good to know that you can lease or purchase a Scrubber-Vac, and that there's a Finnell man nearby to help train your maintenance operators in the proper use of the machine and to make periodic check-ups. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 203 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

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wooling, et cetera

ing, for which the cost is about \$150 more per classroom. However, the average use of the chalkboard in an elementary school, except for sight-saving rooms, does not warrant such lights being put in at extra cost.

The minimum number of wall outlets per classroom is two, each with two receptacles. One outlet in the front and one in the rear of the room are considered adequate for audiovisual use. However, rooms for special study or instruction may need more or special outlets, such as for art, chemistry and physics. A small kiln would require a special outlet taking from 3 to 7½ kilowatts of power.

Homemaking Rooms. The use of modern home-making equipment in junior high and high school programs means further attention to power. Even though the original layout does not provide for outlets for electric ranges, experience has shown that the need for electric-range outlets seems to occur periodically, and it seems wise to provide extra conduit in the panel board to handle this load. Individual outlets also should be installed for washers, dryers and ironers. We also like to provide outlets for toasters, mixing machines, small dishwashers, garbage grinders, and similar equipment.

MAKE DUAL PROVISION

Intercommunication. If a public address system is not among the list of anticipated needs, we strongly recommend that speaker boxes and conduit be installed so it will be easy to install the speakers and wire them in the future.

Because preferences concerning intercommunication systems vary with administrators, it usually is better to make provision for both phone and public address systems. If telephones are specified in plans, it might be desirable to provide conduit for a public address system. Some superintendents request that we put in the conduit in the event that a succeeding administrator may see a need for an intercommunication system different from the one originally installed.

Speech and Radio. In speech rooms there should be outlets for a microphone, speaker and magnetic recorder. If the speech room also will serve as a broadcasting studio for the school, other outlets will be needed for a microphone so that programs originating in the room can be relayed into the school public address system or into

the local broadcasting station. Thought also should be given to running conduit to the auditorium or gymnasium or to other areas where broadcasts may originate.

Television. For TV, generally in intermediate schools and in senior high schools, it is desirable to provide an antenna conduit and carry it down into the auditorium or little theater

Cafeteria and Kitchen. Although many school cafeterias have and will continue to be lighted with fixtures of the fluorescent type, we feel that incandescent lighting gives a more pleasing and restful atmosphere. Incandescent lighting makes foods appear more natural in color and apperizing, whereas fluorescent lighting tends to wash out the color of meats, salads, pies and other foods.

Kitchen lighting fixtures should be of a type that will not collect grease easily and that can be readily cleaned. Either the enclosed globe or a removable reflector type is desirable.

Gymnasium. In the gymnasium, fixtures should be selected both for safety and easy maintenance. We prefer to use shatterproof glass rather than the wire "bird cage" over fixtures. Cleaning of lights can be facilitated by having fixtures installed on a hanger that can be operated by a winch from the gymnasium floor. This pulley and wire or chain arrangement permits the lights to be lowered for cleaning. Another way is to provide space above the ceiling so the custodial staff needs only to tilt the fixtures to relamp and clean them.

Switches are important in the gymnasium, too. If folding doors are to be operated by electricity, the switch should be located so it isn't hidden or otherwise obstructed by the door. A key switch is recommended. It requires only a slight pressure of the key to keep the electrical motor operating. If a partition is not folding or unfolding properly (sometimes the small doors in the partition open if they have not been closed securely),



the operator needs but to release his pressure on the key switch to turn off the electrical power.

The high school gymnasium should be provided with separate conduit for a public address system and electrical scoreboard, even if this equipment may not be installed when the building is under construction.

PLAN FOR STAGE LIGHTING

Auditorium. Even if a school doesn't plan to use stage lighting in its immediate program, it is least expensive to install conduit for dimmers, speakers, floor ducts, buzzers and projection machines at the time the building is being constructed. For an elementary school, the lighting for the stage is very simple. The panel board that serves the auditorium should be of such design that it can readily be converted to accommodate dimmers in the future. We arrange the busses (the heavy copper bars in the back of the panel board) so that by removing a few links the panel is ready to be hooked into dimmer controls.

At the time of construction, it is advisable to install empty conduit extending from the stage to the rear of the auditorium. That conduit can provide cable for a sound projection machine, speaker cords, buzzers or any other type of control or signal equip-

On stage, floor pockets should be included. Then the floor plug, protected with a little door that closes over it, is always ready so a lamp cord can be connected on the spot instead of its being strung hazardously across the stage.

In high schools, stage lighting is very important. The decision here is the completeness of controls desired. A switchboard for stage lighting ranges in cost from \$5000 to \$30,000. A remote-control switchboard costs about \$50,000. These figures pertain to larger stages for auditoriums seating from 1500 to 1800 persons. Smaller auditoriums would take correspondingly less equipment.

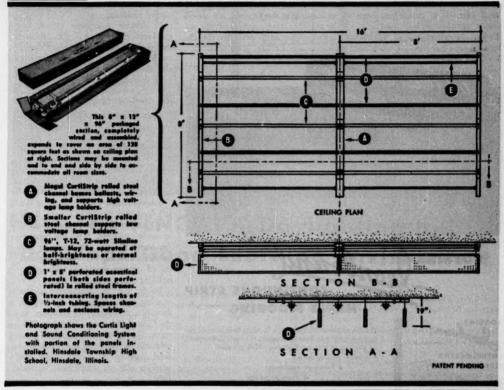
Corridor. If a hallway is long, a continuous strip of fluorescent tubing is monotonous. For beauty, economy and safety, we like to install strips of fluorescent lighting about 16 to 20 feet long, alternating them with incandescent lights that are recessed flush with the ceiling. If the corridor is wide, two rows of lights may be needed.

(Continued on Page 88)



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The incandescent lights should be wired into the emergency lighting system. They also can be used for partial illumination either during the day or evening. When the custodial staff is cleaning classrooms, the incandescent lights provide enough illumination for the corridors. These incandescent bulbs can be lighted when a portion of the building is being used by the public and some lighting is desired in the hallways for appearance sake. It is cheaper to burn a single incandescent bulb than it is to burn a continuous row of fluorescent

tubes when the need for full lighting is not present.

If a corridor has a display case, the location of the light switch can be a source of annoyance. Some schools prefer to have the control switch inside the case. When the case is locked, the lights are inaccessible to children. Other schools specify the type of switch operated with a key, so it can be located outside the display case. The only difficulty with the key type of switch is that the key may not always be available when needed, and the annovance frequently overrides the objection of children's tampering with the lights. Solutions are (1) to have the switch placed high enough to be out of reach by children but still convenient for use by adults, or (2) to control it from a separate circuit from the nearest panel box.

Elevators. An elevator usually is installed in a multistory high school having 1500 or more students. It may be used both for freight and passengers. It is especially needed for handi-

capped children.

If elevator equipment cannot be purchased at the time of construction, the shaft should be provided with conduit for the call switches. Conduit also should be run to the main elevator operating equipment.

FOR COMMUNITY USE

Open-House Lighting. When schools have open house several times a year, usually every light and almost every piece of equipment are turned on. Such a load considerably exceeds everyday usage. Unless the feeder and service are designed to carry this load, some or all of the power will fail.

Schools usually are not wired to the full load that they might need if all the lights, services and appliances were in use at one time. With the presentday trend for use of schools by the public, additional cost for wiring and use of current should be included in building plans.

Public use of classrooms in the evening also will govern spacing of fixtures and intensity of lighting. In the Central Elementary School at Wilmette. Ill., the classrooms are designed primarily for daytime use. The artificial lighting is placed nearer the corridor side to supplement natural light.

Emergency Lighting. Rooms in which the public may gather should have emergency lights which connect to a separate emergency panel. The panel should be independent of the building's electrical system in case all fuses blow or all circuit breakers open. It can be connected to the main cable coming in from the power company's

Emergency lighting is needed for stairwells, exit lights, incandescent spots in corridors, auditorium, multipurpose room, other large assembly areas, swimming pool, and the elevator

The emergency lighting does not provide for use of full electrical power. but it does provide enough light for



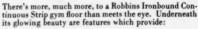
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people who are not familiar with the building to see exits and stairs.

Ventilating System. In the ventilating system for a large gathering place, we install a device in the shaft which in the event of fire shuts off the fans so these will not spread smoke and fire. A thermostat in the shaft is operated by temperature. It is set at 120° F., the temperature at least of an initial fire.

Fire Alarms. We believe a school should have either a single code or multiple code fire alarm system, depending upon the size of the building.

The single code is one that sends out the same signal regardless of the station where the glass is broken. For instance, the signal might be five rings and a pause, five rings and a pause, and so forth. Or the alarm can be sounded on a horn, following a signalstop, signal-stop code.

The multiple code type means that each station where the glass is broken sends out its own individual signal. This might be one long and three short for a location near the chemistry room, or two long and two short for the shop, with similar signals for

other sections of the building. In a larger building, the code designates the floor and location immediately. In the average elementary school, the multiple code type is not necessary.

Most important is the fact that either type of code will ring at intervals. A steady blast or constant ring instantly seems to create panic. A signal and hesitation warn the school of a fire, but at the same time seem to give assurance that there is time to get in line and out of the building.

Heavy-Duty Outlets. The use of scrubbing and polishing and waxing machines is increasing. These have a heavy-duty motor needing more than the usual '15 ampere line. The outlets should be of the grounding type, so if a short develops in the machine the operator is not subject to injury or even electrocution. This applies especially to machines that are used where there is moisture—in the kitchen or when scrubbing floors.

Some manufacturers provide electrical equipment with a three-conductor cord. Under the national electrical code, such provision is optional.

Shops. Motors in the school shop are of fractional horsepower, and power to them can be provided from standard outlets. The electrical code requires that switches be installed on machines themselves. It is practical to put in additional floor ducts, so when eventually more outlets are needed the floor doesn't have to be torn up to add more conduit.

UNDERGROUND WIRING

Incoming Electric Service. When we bring in any type of service, either primary or secondary, we attempt to bring it in underground from a pole away from play areas and, if possible, outside the grounds. A pole near the playground is a temptation for boys to climb. Underground wiring also removes the hazard of injury if kites become entangled in wiring. There always is the danger that some children may throw cord or other electrical conductors over low-hanging wires, which may cause injury.

The average premium for underground wiring for an elementary school is somewhere around \$800 to \$1000. This seems rather high, except when compared to the cost of loss of life or injury resulting from overhead wires.

Exterior Lighting. Putting lights on the building instead of on separate standards lowers the cost, since the



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Denver 2. Colorado • American School Supply Co., 1514 Arapahoe El Paso. Texas • D. L. Pillow Co., 1021 E. Missouri Street Honolulu 5. Hawaii • I. Oki Import Co., Ltd., P. O. Box 1972 Lubbock, Texas • Joe W. Toombs, P. O. Box 1181 Portland, Oregon * Bushong & Company, 323 S. W. Park Salt Lake City, Utah * ZCMI, Wholesale Stationery Division San Francisco, California * H. S. Croker Co., Inc., 720 Mission Street Seattle 11, Washington * Lowman & Hanford Co., 1515 Second Avenue, P. O. Box, 1888 building itself can provide the elevation necessary for mounting fixtures.

Covered boxes with connections for future speakers and floodlights also can be placed on the building if the school plans outdoor assemblies or commencements. Weatherproof outlets might be anticipated for future playgrounds or parking areas. These can be protected by weatherproof boxes and sealed off just below the parapet of the building.

Future Additions. To reduce cost of future installations, thought should be given to spare capacity in the main

distribution center for electrical power. If the future addition is known, empty conduit can be run and terminated at points from which they can be easily extended to the future addition at a later date.

Location of Distribution Panels. Safety and economy apply, too, to the selection and placement of electrical distribution equipment.

We prefer a panel board equipped with circuit breakers rather than fuses. The maintenance cost is virtually nil over the years, and there is no replacement of fuses. The original cost

also is not much greater than for the fuse type of panels.

Circuit breakers open up, discontinuing electrical current to the appliance or room where trouble has developed. To restore current, the circuit breaker merely has to be reset. However, if the cause of overloading still exists, it will continue to reopen until the trouble is rectified.

In the case of blown-out fuses, there usually is a temptation to install a higher-rated fuse. If the electrical load is too great, the wires may start to burn before the fuse actually blows.

For lighting in general, panel boards should be located in some place other than the corridor, preferably in the janitor's closet. Such a location prevents tampering by children and also improves the appearance of the hall.

The distribution board for the mainline switches-which feeds panels in the janitor's closet, kitchen, shop or similar place-ordinarily is installed adjacent to the boiler room. The board should be of the "dead" front and enclosed safety type. Open-knife switches are of the "live" front type, and anyone touching any part of the copper bussing may be exposed to shock. Even though custodians handle this equipment, they are not always experienced persons, and such equipment must be properly selected and installed for their safety.

USE ONLY GOOD MATERIALS

Materials. Long-time savings also can be made by buying good materials. We prefer a higher grade wire (called an RH wire) that costs only a few more cents per foot. It allows the use of more current and at the same time smaller conduit.

Wall switches that carry a "T" rating also are desirable. This indicates they have met rigid test standards and will not fail after a short time.

When wire is run in a conduit that is in direct contact with the ground or where moisture is present, it should be of a type impervious to moisture. In the past, lead-covered wire was used. However, with the new plastic and synthetic coverings now available, the same protection is obtained at much less cost.

Careful analysis of immediate and long-time needs may take much time and patience in the beginning. But the chief consideration is that such foresight will hold maintenance costs to a minimum and will guard against excessive costs for future installations.



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Citizens Assembly Demonstrates Growth of Public Interest in Schools

ST. LOUIS. — The tragedy of America is that "we haven't yet recognized that the ultimate victory will go to the side which wins the war of ideas," George Gallup, director of the Amercian Institute of Public Opinion, told 750 persons from 33 states, gathered in St. Louis for the third annual dinner of the National Citizens Commission for the Public Schools.

Citing widespread ignorance of world affairs, particularly in regard to Asia, Dr. Gallup urged an "intellectual renaissance." He made three proposals: (1) that the quality of education be judged by the quality of the product, that is, by testing the extent to which specific goals have been attained, (2) that an "international standard of culture" be established so that Americans will recognize achievements elsewhere, and (3) that schools and colleges give students upon graduation "a life-time course of reading and study carefully worked out with the student himself."

In her address, Mrs. Eugene Meyer, commission member, termed the public school system a "scapegoat" which tends to get the blame for moral, mental and emotional problems that have arisen "because people live a disorderly life in a disorderly community."

Schools can be the focal point of successful community reorganization to meet modern needs, she said, but they cannot be expected to carry the burden alone.

Other speakers at the dinner, high point of a two-day citizens assembly on education, were Dr. Charles Allen Thomas, president of Monsanto Chemical Co., Leo Perlis, national director of the C.I.O. community services committee, Henry Toy Jr., N.C.C.P.S. executive director, and Roy E. Larsen, commission chairman and president of Time, Inc.

Dr. Thomas said industry wants from the educational system young men and women who can read and understand, who have a broad comprehension of the principles of mathematics, who have an appreciation of history, and, above all, "people who can think."

Above: Discussion panel, Lester B. Granger, National Urban League; Neil McElroy, president, Procter & Gamble; Roy E. Larsen, chairman of N.C.C.P.S.; Fred K. Hoehler, director of public welfare, Illinois, and Henry Toy Jr., director of the national citizens commission.



Two headliners at Citizens Assembly were Charles Allen Thomas, president of Monsanto Chemical Company, and Mrs. Agnes E. Meyer, Washington Post writer and lecturer.

During the two-day session, January 25 and 26, three panel discussions a day were held for the participating citizen leaders, education representatives, national organization delegates and commission members. Topics for the panels ranged from a discussion of the commission's program through school-community relations, citizens committees, school boards, the school program, and cooperation among national organizations working for better schools.

In summing up the meeting, Henry Toy stated: "This Citizens Assembly was an exemplification and reaffirmation of the belief that citizens committees and professional educators working together prove to be the best answer to school improvement in our democracy."—GLORIA DAPPER, assistant director, National Citizens Commission for the Public Schools.

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FROM GIVENS TO CARR

N.E.A. Will Promote William G. Carr to **Executive Secretaryship When Givens Retires**

B. P. BRODINSKY

On August 1, 51 year old William G. Carr will take over the desk of Willard E. Givens to become the third full-time executive secretary in the history of the National Educational Association. His will be the opportunity to lead the association through its first 100th birthday (1957) and on into the second century of N.E.A.'s existence.

I talked to Dr. Carr the day his appointment was announced and seven months before he was to assume his new post. He did not seem disconcerted by the responsibility that the N.E.A. board of trustees had, by unanimous vote, placed before him. The trustees had looked far and wide for an N.E.A. secretary. The guessers and prognosticators hinted the next secretary would come from "outside the N.E.A. building." They were wrong. He had been working on N.E.A.'s sixth-floor office for

We talked for more than an hour in that very office-the spot where Bill Carr had been writing the speeches that always stir his audience; where he pondered questions to share with the Educational Policies Commission; where he wrote letters the globe over to those who, like himself, feel that a world organization of teachers can help build

FIRST A SERVANT

"I will be a servant, and I hope in time to deserve the name of leader." said Dr. Carr. "A professional organization needs both.

I asked Dr. Carr what he planned to do about tying together more closely the N.E.A. departments, commissions and other units, which I described as "sprawling." I asked how he would go about developing a mechanism through which the profession might speak in a united voice-and I hinted that such a voice does not exist. I asked how he teacher do a better job by giving him

would develop greater loyalties among the nation's teachers to the N.E.A. 1 asked what changes should be made in the strategy for federal aid to education.

He recognized that my questions were presented to draw him out on issues in which there is great interest. We agreed the questions were too early in coming.

But it was clear that William Carr had already gone through the very painful task of thinking about the ultimate purposes of a professional organization. That thinking goes back not just a few months to the time insiders began to mention him as a possible candidate for the big job. It goes back to 1936 when the young but serious-minded secretary to the Educational Policies Commission sweated through the complex questions of the whys, hows and wherefores of a professional organization. The answers become the first report of the policies commission. Dr. Carr will live by the principles hammered out at that

Take the question of purpose. Some people believe the N.E.A. should exist only to protect and enhance the economic status of teachers. Others believe that a professional organization should be concerned only with the curriculum, teaching methods, and teaching philosophy. Dr. Carr rejects both points of view. He believes that a professional organization should first of all work for better schools.

"I am convinced that teachers want to put the national interest first, selfinterest after that," he told me. "I have a high opinion of the American teacher. I believe that most teachers will not be satisfied with asking: 'What will the organization do for me?' They also want to know: 'How will the organization help me do a better job for the children and the community?

"I think the N.E.A. can help the



Willard E. Givens, N.E.A. chieftain since 1935, congratulates Dr. Carr. During his 17 years as executive sec-retary Dr. Givens helped the N.E.A. grow from a membership of 200,000 to 465,000. He was active in creating the Educational Policies Commission, the Defense Commission, and the Safety Education Commission. He believes that the work of the adult education division with its pioneering research in group action will be the best remembered achievement of his administration. Observers say that Dr. Givens' tenure of office was characterized by aggressive action and was closely attuned to the issues of the time. Dr. Givens' one regret: Failure to see the enactment of federal aid to education.

facts and new ideas about the processes of education, by protecting his economic and civic rights, and by building a public climate favorable to good teaching."

Dr. Carr's ideas regarding membership are also clear-cut. He is well aware that although the N.E.A. will be 100 years old in 1957, it's still a "minor" in terms of membership. It still enrolls less than half the nation's teachers.

"But we need not resort to pressuring or cajoling," he said. "Half-hearted members are a doubtful asset. We shall continue to gain members because we shall continue to give teachers service and a feeling that they have friends and strength-organized strength.

"I believe that membership in a professional organization should be entirely voluntary. Administrators, however, have a responsibility in explaining to every teacher the values of a professional organization and helping them to take part in its activities."

What about politics? Should organized teachers enter vigorously into

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Dr. Carr at his sixth-floor desk.

discussion of economic and social re-

"Of course, organized teachers must

form

be concerned with what goes on around them," Dr. Carr replied. "In fact, they must become much more sensitive to social conditions and social trends. But this does not mean partisanship. This does not mean that teacher organizations should be used as a tool to bring about this reform or abolish that tradition. It means that teachers should call to the attention of the public the implications of social trends that will affect children and the schools. For example, today the increased birth rate is placing new burdens upon the schools. The education of children will be threatened unless more public support comes very quickly. The teachers should be among the first to remind

Dr. Carr is also clear that the N.E.A. should come to the defense of teachers who are treated unfairly.

improved social conditions."

the public that the tensions created by

military or political conditions affect

the mind of the young. Such advice is

professional advice. And it can lead to

"In some disputes the teacher is right; in others he may be wrong. The first job of a professional organization like the N.E.A. is to make clear to everybody the rights and the obligations of teachers. After that it can select important cases in which it can be shown that civic or professional rights of teachers have been impaired. Then the N.E.A. should throw its weight to correct the injury."

One day the airplane on which Dr. Carr was returning to the United States from an international meeting was forced to make an unscheduled stop at-Reykjavik. To while away his time, Dr. Carr entered a telephone booth and chatted with Helgi Trygvasson, a teacher association official of Iceland.

Dr. Carr could probably telephone a teacher organization official or minister of education in any country outside the iron curtain. His interest in international education goes back to 1928 when he wrote his first book, "Education for World Citizenship." He was among the men and women in San Francisco who helped write and rewrite the educational clauses of the United Nations charter. He had a hand in the making of UNESCO and the World Organization of the Teaching Profession.

These facts portend that the new N.E.A. secretary will continue to give high priority to international education. But that interest will be coupled with another. "During the next several years," he said, "the problem of the schools is to achieve friends abroad and to strengthen defenses at home."

The way to win friends abroad, Dr. Carr told me, is to expand travel and interchange of teachers and students across national boundaries; send money, food, clothing, books and other help to the distressed teachers of other countries, including those of Korea; teach our youth (and practice ourselves) a serious and responsible attitude toward considerations of American foreign policy; teach about the work of the United Nations and the activities associated with it, and finally, help our own children to see America as it really is -a nation and a people of honesty, generosity and courage.

BASIC TO NATIONAL SECURITY

And as for defenses at home, Dr. Carr said that education is basic to the components of national security-material and manpower. In his own words: "The road from the Messabi iron ores to a piece of artillery is long and involved. At every step of the way from pit to ore boat to smelter to foundry to forge to machine shop to ordnance factory to combat duty, the weapon passes from one pair of skilled hands to another. Few workers can do their part in this process without substantial amounts of education, and only the schools can develop basic competence in language, number and human relations on which all technical training depends. If statesmanship is really the ability to look ahead, we must deny the title of statesman to any public servant who permits the deterioration of our schools.



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re from Washington

U. S. budget-simplified

► At one point in his \$85,400,000,000 budget for 1953, President Truman says that education and research will require \$624,000,000. This figure, for some unknown reason, includes money for the Census Bureau, but obviously not for G.I. school grants. At another point, he estimates that education and housing should take 1.3 per cent of the total budget. These conglomerate figures do not make it easy to know what the President means by education or why he lumps it with estimates now for research, now for housing. Nor are things made clearer by the fact that the White House estimates include ordinary current appropriations, annual indefinite appropriations, permanent appropriations, contract authorizations, appropriations to liquidate contract authorizations, reauthorizations of contract authority.

Perhaps it would be best to take a simple man's view of the budget:

Here are the items about which there will be little debate: Office of Education salaries, \$3,200,000; vocational education grants, \$19,123,000; school lunch, \$83,367,000; land-grant college aid, \$2,480,000; vocational rehabilitation, \$23,000,000.

Here are the items about which Congress will have some questions but is almost certain to approve: veterans education, \$626,000,000; school construction in federally impacted areas, \$150,000,000; maintenance and operation of schools in these same federally affected districts, \$40,000,000; loans for housing, \$60,000,000.

Here is an item Congress will probably cut in half: the National Science Foundation, \$15,000,000.

Finally are two items Congress will turn down: general aid to elementary and secondary schools, \$300,000,000; college scholarships, \$30,000,000.

Dollars for building?

► Item to watch is the \$150,000,000

affected areas. This is twice the sum President Truman asked for the same purpose a year ago. Debates on this request should reveal how Congressmen feel about aiding school building not only in the hard-hit defense areas but in school districts everywhere. If Congress votes this sum, Washington educators will be encouraged to postpone their ancient battle for general aid and go all-out only for federal aid to school construction.

President Truman dropped a hint that he may send a strong message to Congress urging federal aid for school construction. The hinting was done at his first press conference after sending up the budget to Capitol Hill. It was also done in the budget message itself. "We are moving forward," said the President, on a detailed three-year nationwide survey of our school construction needs generally. . . . The states are making good progress in surveying their shortages of facilities and their resources available to meet these shortages."

Then Mr. Truman added a statement which to many Washington educators opens the door for a full drive for school construction legislation. "The information coming in from this survey will help us to determine what the future rôle of the federal government should be in relation to school construction needs." The "future rôle" means only one thing to Washington circles: pitch in with federal dollars.

The Justices listened

On January 31 and February 1 the U.S. Supreme Court heard lawyers argue whether it is constitutional to give up official public school time so that children may attend church instruction. The Justices said little during the arguments in the so-called Zorach case; they will have their say in the opinions, expected by May 1.

When it actually comes, the decision will take its place next to that of the

point in American education. For, the decision will either banish forever "released time" from public schools or will reinforce it.

The prognosticators now say that the court will ban religious instruction on school time in 1952 just as it banned religious instruction on school property in 1948. The 1948 ruling was decisive. It was eight to one against religious education on public school property. Even the sole dissenter, Justice Reed, concurred that pupils cannot be released from their legal duty of school attendance for religious classes. The majority opinion was clear-cut. Said Justice Black:

"The facts [of the McCollum case] show that pupils compelled by law to go to school for secular education are released in part from their legal duty upon the condition that they attend the religious classes. This is beyond all question a utilization of the tax established and tax supported public school system to aid religious groups to spread their faith. And it falls squarely under the ban of the First Amendment.'

Said Justice Frankfurter: "The public school must keep scrupulously free from entanglement in the strife of sects. The preservation of the community from divisive conflicts, of government from irreconcilable pressures by religious groups, of religion from censorship and coercion however subtly exercised, requires strict confinement of the state to instruction other than religious, leaving to the individual's church and home indoctrination in the faith of his choice."

The last four years have changed many things in Washington but they have probably not changed the opinions of the Justices.

Tradition is safe

It's an American tradition that only neighbors have the right to decide when and under what conditions a young man is to be mustered into uniform. Such request for school construction in war McCollum case (1948) as a turning local draft board control would be abol-

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wire from washington

ished, however, if those writing policy for American education would have their way. A new bulletin by the Educational Policies Commission and the American Council on Education proposes that the power to draft students be passed from local boards to a national manpower board. They argue that only a national agency can decide how many students need to be drafted and how many need to be deferred for long-range civilian and military needs.

The new bulletin is entitled "Education and National Security." It criticizes Selective Service by local boards. In fact, the bulletin says, local boards cannot be selective when the armed forces call for large numbers of men. Local boards have no alternative but to produce men for duty, including potential brilliant scientists or future teachers.

A simple remedy, the bulletin says, is to defer all students. The realistic remedy, the bulletin says, is to set up

a national board "with authority to determine educational deferments according to immediate and long-run needs. By this means, the function of assuring adequate flows of scientists, engineers, doctors, area and language specialists . . . would be lifted out of the local boards and centralized in a single national authority."

Selective Service officials dismiss the proposal as "another pipe-dream of educators." The tradition of mustering in by neighbors has not been jarred.

Educators uncertain on UMT

► Hearings on U.M.T. before the House armed services committee disclosed again that the Pentagon and the veterans organizations are for conscription; church and pacifist groups are against it, and educators are undecided. The last point may be something new. A year ago, those who claimed to speak for education were very close to saying, Yes, we'll buy U.M.T. if we have to. The 1951 meeting of the American Council on Education endorsed a universal military training and service plan. The air was thick with other schoolmen's plans for conscripting youth, each accepting the inevitability of conscription but seeking to protect the educational interests of youth.

Today the mood is changed. The 1952 American Council on Education meeting by-passed the issue, decided to carry on a new referendum among its members. The N.E.A. Department of Higher Education is "restudying" U.M.T. President Conant who a year ago sparked a Committee on the Present Danger (to endorse his own U.M.T. plan) has let the group slip into oblivion. The inclination to say Yes to the Pentagon has all but disappeared.

Vocational educators check themselves

▶ About a year ago U.S. Commissioner of Education McGrath reshuffled several divisions in his Office of Education. He left untouched the vocational education division. For more than a quarter of a century this branch has been somewhat of a brahmin. It has been the only division empowered to pass out federal grants to states and has been backed by a closely knit, entrenched group of educators with influence on Capitol Hill.

Today the vocational education division is in trouble. A House subcommittee headed by Rep. Porter Hardy (D.-Va.) has accused it of inefficiency,



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of failure to police state programs, of faulty auditing of state vocational expenditures. Commissioner of Education McGrath and Ray Gregory, his assistant for vocational education, tacitly admit that the House subcommittee may be partly right. They have invited seven state educators to come to Washington, look over how the division operates, review auditing procedures, suggest more clear-cut assignments to staff.

The reviews will work under the chairmanship of J. B. Perky, a state education official in Oklahoma. He and his group will have at their disposal all the resources of the Office of Education, Commissioner McGrath promises, and will have freedom to write a bill

of recommendations.

Interdisciplinarians at work

➤ Middle class parents expect the schools to support middle class values. This expectation fits in nicely with public school teachers, who are for the most

part also middle class.

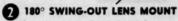
The Association for Supervision and Curriculum Development is not altogether happy with this state of affairs. The A.S.C.D., at least the committee that wrote its new yearbook, questions whether middle class values will do in an age of tension. The A.S.C.D. includes in middle class values punctuality, neatness, good manners, docility, the drive to get ahead, frugality. All these are well and good, says the A.S.C.D. in "Growing Up in an Anxious Age." "But missing are expectations that psychologists might consider more fundamental, such as the development of intellectual curiosity, confidence in one's self, ability to get along well with other children, respect for all individuals regardless of race, color or creed, developing insight into one's self and others, training into use of the scientific method for solving problems, and the development of moral courage and moral integrity."

From this quote it's apparent that the new A.S.C.D. yearbook is not a conventional one. In fact, it's said to be the first yearbook to use the "inter-disciplinary approach" to education. This means it was not written by educators alone. Each "problem of living in an anxious age" was discussed with anthropologists, pediatricians, social workers,

psychiatrists.

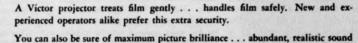
Dr. Otto Klineberg, professor at Columbia University, who wrote the introduction, says that education can no longer draw its inspiration from one or even two sciences. It must go to all.





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NEWS IN REVIEW

Would Substitute Enlarged R.O.T.C. for U.M.T.... National Educational TV Network Favored . . . Labor-Management Groups Survey Schools for Defense Use . . . Citizens

Commission Opens Minneapolis Office . . . New York City Suspends Eight Teachers

Labor-Management Groups Survey Schools for Defense Use

WASHINGTON, D.C.-For the first time since the Korean war, Secretary of Labor Tobin has given public vocational schools the first indication as to their rôles for training manpower.

"In 1952," Secretary Tobin said, "the manpower problem will not be an overall manpower shortage. The problem will be shortages of important skills in many areas. It will not be a problem of quantity of workers but of quality."

Direction for training activities will be provided by regional and area labormanagement committees now being set up by the U.S. Department of Labor throughout the nation.

Each area committee will be asked to set up a task force to survey the training needs in the area and the vocational school facilities which exist to meet these needs

The primary responsibility for training," Mr. Tobin declared, "rests with the employer. But vocational schools, colleges, state and federal apprenticeship services, and all other training resources in the communities should be as possible."

committees to make available ample occupational guidance information so that young workers may find the jobs in which they can make their best contribution to defense production.

Suspend Eight Teachers Who **Balk Query on Communist Ties**

NEW YORK .- Dr. William Jansen, superintendent of schools here, has filed charges of "insubordination and conduct unbecoming a teacher" against eight teachers in the system who refused to say whether they were Communist party members.

The nine-man board of education is Would Substitute Enlarged expected to receive the charges at a scheduled public meeting and then to appoint a trial examiner, who subsequently will announce a hearing date.

The eight teachers are all members or executives of the Teachers Union, Local 555, United Public Workers, independent. The board has banned the union from all official dealings with the public school system on the ground of alleged pro-Communist leanings.

Dr. Jansen said he had notified the eight teachers of their suspension "in accordance with the provisions of the law and the by-laws of the board."

Citizens Commission Opens Office in Minneapolis

MINNEAPOLIS.-The National Citizens Commission for the Public Schools has opened its sixth regional office here at 643 Midland Bank Building. Cecil H. Hartung will direct



C. H. Hartung

used to give industry as much assistance the office, which will serve six states: Iowa, Minnesota, Nebraska, North Mr. Tobin urged the area manpower Dakota, South Dakota and Wisconsin.

Mr. Hartung was graduated by South Dakota State College in 1938 and has had eight years of business experience between 1938 and 1951 in industrial training and education, and personnel administration, with a five-year interim as an instructor at the Army Engineers School at Fort Belvoir, Va. He has been an active member of the Minneapolis Citizens Committee on Public Education for several years.

In 1950-51, the education committee of the Minneapolis Junior Chamber of Commerce, under his chairmanship, won the national awards contest.

High School R.O.T.C. for U.M.T.

WASHINGTON, D.C. - R.O.T.C. in high school-expanded, compulsory and made universal-would do away with the need for U.M.T., says Rep. Charles B. Brownson of Indiana.

Mr. Brownson told the House armed services committee that if it is possible to produce a good second lieutenant with four years of college R.O.T.C. and six weeks of summer camp it is equally practicable to produce a first-class private during two years of high school R.O.T.C. and six weeks of summer training.

Rep. Brownson says that high school U.M.T. is in effect a simplified citizens training plan. He says it will cost less and will carry out all the objectives of universal military training. He pointed out that already 62,554 high school students have voluntarily enrolled in R.O.T.C. in 265 schools representing 95 different high school systems.

Those young men who drop out of their high school before their compulsory R.O.T.C. training is complete would be given a choice of three methods of making up this deficiency, Rep. Brownson said.

1. They may continue to attend R.O.T.C. courses although they are no longer in school.

2. They may substitute an equivalent number of hours of recruit basic training with their local Ready Reserve or National Guard unit.

3. They may substitute attendance at two six-week summer camps during which they will receive basic training.

In a first reaction to Brownson's plan the National Council of Chief State School Officers said: "Educators together with parents would undoubtedly be opposed to military training in high schools by a huge majority."

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NEWS...

Jersey City Teachers Expect Top Salaries to Be Voted

JERSEY CITY, N.J.—The board of education here has recommended salary increases for the city's public school teachers that would place them on an equal basis with New York teachers as the highest paid in the country.

Bernard Berry, president of the board, said that the new salaries, which were to have been approved by the board of school estimates on February 14, would exceed those paid to public school teachers elsewhere in New Jersey.

The new salary scale would raise the minimum from \$2900 to \$3100 and the maximum from \$5700 to \$6500.

Southeastern Business Officials Form Regional Association

ATLANTA, GA. — The newly organized Southeastern Association of School Business Officials will hold its first annual meeting here on March 20 to 22. Time has been scheduled for "Here's Our Problem" sessions so that members may discuss common regional problems concerning buildings, construction, maintenance and operation, purchasing, and supply and accounting. Paul D. West, superintendent of Fulton County schools, Atlanta, Ga., will talk to the group about school business management from the superintendent's point of view.

The Southeastern association is the result of plans originally discussed at the S.B.O. convention in Toronto last fall for creating interest in school problems first on the local level. President of the group is A. C. Hutson Jr., assistant business manager for city schools, Knoxville, Tenn. Norman J. Aaron, assistant superintendent of Fulton County Schools, Atlanta, Ga., is secretary. There are eight directors.

State associations of school business officials that have scheduled meetings are: Michigan in March, Indiana and California in April, Wisconsin and New Jersey in May, and New York, and Ontario, Can., in June. Illinois is organizing a state association.

Child Labor Bill Vetoed

HARRISBURG, PA. — A bill, introduced at the request of Pennsylvania's Amish farmers, that would have permitted 14 year old children to quit school on completion of the eighth grade to work on the family farm, was vetoed recently by the governor, John S. Fine.

Librarian of Congress Lashes Out at Suppression of Books, Ideas

WASHINGTON, D.C. — "Ideas are always under fire, and books, which are their vehicles, are always under fire," stated Luther H. Evans, Librarian of-Congress, recently in an article which appeared in the Washington Sunday Star.

Dr. Evans described the most repellent of these attacks as those "which are accompanied by obvious desire to seek or to hold public office or some other minor material advantage."

"We have heard two important book reviewing journals solemnly charged with deliberately slanting their review and so corrupting the public mind," Dr. Evans continued. "We have seen a public librarian of over 30 years' service discharged because her shelves contained books unpalatable to a self-constituted body with no direct responsibility for her supervision. We have seen a school system threatened with investigation. . . . We have seen literary classics as well as journals of opinion banned from student reading lists because some portions of them gave offense to some or-

ganized group.

"For the great majority of us," Dr. Evans asserted, "this question of the attack on books is rendered more difficult to see because of the fact that in spite of our pride in a free press we are in reality surrounded by censorship.

"History has taught us, if it has taught us anything, that no individual and no group has ever had a monopoly of the truth; that human progress has been most assured where the traffic in ideas was freest, and that suppression of ideas is probably the least successful method of combating them."

Supreme Court Hedges on Segregation Issue

WASHINGTON, D.C.—By a 7 to 2 vote the U.S. Supreme Court set aside, at least temporarily, the decision of a special three-judge U.S. District Court in Charleston, S.C., which upheld segregation of white and Negro school children in South Carolina. The Supreme Court vacated the decision on the ground that the special court had not determined finally all the issues before it.

Lawyers for the National Association for the Advancement of Colored People appealed the case directly to the high tribunal following the lower court's decision.



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you see interfere with distinct hearing. Children must strain for every word. So tension and fatigue increase, minds wander, learning inevitably suffers.

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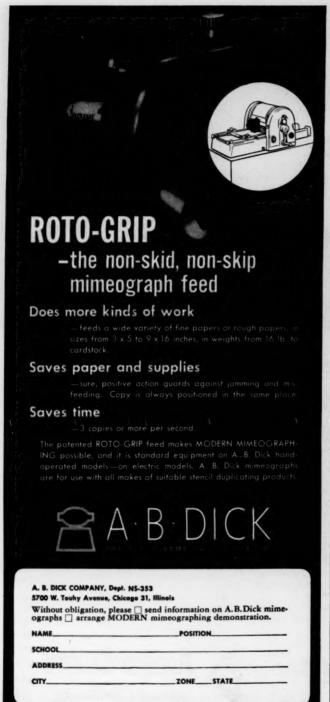
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Stress Importance of F.T.A. Clubs to Future Teacher Supply

WASHINGTON, D.C.—Teacher education officials from eight Eastern states believe that active Future Teachers of America Clubs (F.T.A.) will help assure an adequate supply of teachers during the next few years.

The officials expressed their conviction at a regional meeting of the National Commission on Teacher Education and Professional Standards held in Washington, Present were delegates from South Carolina, North Carolina, West Virginia, Virginia, District of Columbia, Maryland, Delaware and

New Jersey.

The Delaware delegation urged that pupils belonging to F.T.A. clubs should be placed in teaching situations as often as possible. The Maryland group said that F.T.A. should not be restricted to high schools but should be organized in elementary schools "as early as possible." The New Jersey group said that F.T.A. activities need to be evaluated but in the main it endorsed them as an important means for maintaining the teacher

In a separate work session, one panel identified the current criticisms of teacher education. The most commonly heard charges are that general education of teachers is inadequate in both quality and quantity and that there is excessive stress on methodology. The group agreed that there is some validity to both criticisms. It replied that general education is being improved but the improvements are not widely publicized so that both the public and executives who hire teachers are familiar with them.

The group denied that secondary school teachers are subjected to "excessive methodology" but admitted that this may be the case for elementary teachers. "Actually many so-called methods courses are in reality devoted to subject matter," the teacher training officials said.

The main session of the regional meeting was addressed by T. M. Stinnett, executive secretary of the Teacher Education and Professional Standards Commission.

Sarah Lawrence College **Backs Faculty Independence**

BRONXVILLE, N.Y.-In answer to a recent barrage of charges-some of them from American Legion leaders - that Sarah Lawrence College is harboring



NEWS.

Taylor, president, and Harrison Tweed, board chairman of the college, have issued a joint statement denying the

Outlining the principles accepted by the faculty, the statement reads:

"It is a principle accepted by the faculty, the president and trustees alike that there is to be no indoctrination of students with a political, philosophical or religious dogma. No person, therefore, who takes his intellectual

Communists on its faculty, Dr. Harold orders from an outside authority, whether Communist or any other, could be given or could retain the responsibility of membership in the Sarah Lawrence faculty."

The statement concludes:

"The board of trustees and the president have confidence in the integrity and scholarship of the members of the Sarah Lawrence faculty, and will continue to stand on these principles of free inquiry and intellectual independence. They do so for serious reasons.

"The idea that a member of the faculty should take intellectual or political dictation from any quarter is alien to everything Sarah Lawrence stands for. Prejudiced or politically inspired teaching would quickly reveal itself, and would be rejected by the students and by the whole college."

Children of Migrant Workers May Get Better Schooling

WASHINGTON, D.C.-Uncle Sam is worried about the education of children who follow the crops.

Concern for the children of a million migrant farm families is soon to be translated into action by the White House, Department of Labor, Department of Agriculture, and Federal Security Agency. Authorities from these agencies have already assembled facts to show that children-on-the-move start school later, attend fewer days, make less progress, and drop out earlier. In his budget message President Truman pledged his "earnest support to meet the problem of these children.

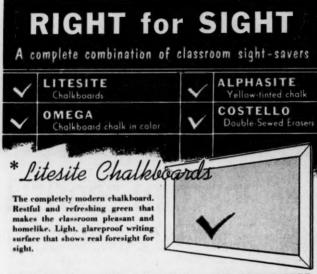
Uncle Sam's first task is to impress upon the states through which farm children pass each year that each migrant child requires special facilities and teaching materials. To lay the basis for the instructional services the President has requested Congress to approve \$181,000. The funds are to be used for studies to determine how to keep track of these children-on-the-move, how to get them into school, and how to adopt school programs to meet their needs.

Visibility Impaired by **Tinted Windshields**

BERKELEY, CALIF. - Administrators who are responsible for purchase of school buses may be interested in a preliminary report by the University of California's Institute of Transportation on the comparative visibility of tinted windshields.

The report by the institute revealed that ordinary windshields permit a significantly greater degree of visibility. The study was based on tests in which observers were asked to spot and identify a dummy pedestrian and panels, through a tinted windshield and through an ordinary one.

"In a total of 50 observations by five observers the dummy was seen about 40 feet farther away and the other objects about 100 feet farther away when viewed through the ordinary windshield," the report concluded.



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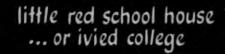


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NEWS...

Pontiac High Broadcast 500th Program Jan. 28

PONTIAC, MICH.—The 500th program of the Pontiac High School Radio Workshop was heard January 28 over station WCAR, Pontiac, Mich., and commemorated one of the oldest continuous activities of its kind in the country.

Today the Radio Workshop is recognized as a standard part of the Pontiac High School curriculum. All of the programs are utilized as in-school teaching aids and are heard by an estimated 45,000 students in 98 schools in the area.

The first broadcast of the series of programs was presented March 5, 1940. The original schedule of one program a week has now expanded to three quarter-hours each week, each an entirely different type of program directed to a separate age group.

Opening School With Prayer Opposed in Schenectady

SCHENECTADY, N.Y.—Two Protestant church groups in this city, the board of the First Methodist Church and the First Unitarian Society of America, have joined forces with the New York Board of Rabbis and the Free-Thinkers of America in opposing the New York State Board of Regents' proposal that public school pupils open each school day with a prayer.

Both groups, however, praised the regents for suggesting more stress on the moral and spiritual heritage of the United States.

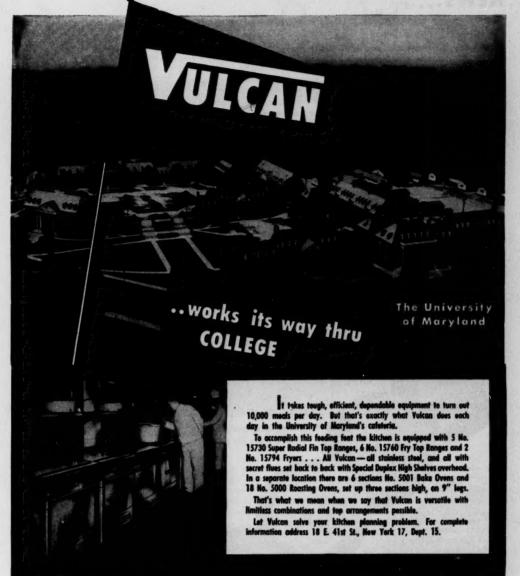
The Schenectady school board still is studying the proposal made by the regents November 30.

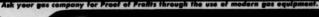
The proposal has the support of the directors of the New York State School Boards Association, and many Catholic and Protestant clergymen have endorsed the recommendation.

Oppose Naming of Priests to Select Indiana Textbooks

INDIANAPOLIS. — The Indianapolis Ministerial Association has protested, and organized a committee to oppose, the action of Wilbur Young, Indiana superintendent of public instruction, in asking 19 priests to help select 169 books to be used in the public schools of the state for the next five years.

Mr. Young defended his action on the theory that Roman Catholics are "considerably versed in spotting Communist or subversive influences."







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North Carolina School Heads **Evaluate Preservice Training**

RALEIGH, N.C.—Replies from 100 superintendents, who returned checksheets on their preservice training to North Carolina's State Advisory Committee on Educational Administration. indicate the need for more emphasis in all areas of school administration, the North Carolina Public School Bulletin reports.

in a study on the preservice training bond campaign," and "purchasing school of school administrators.

Another finding of the study sponsored by the Kellogg Foundation is that greater emphasis should be placed on law, public finance, and public speaking, all with respect to teaching methods, which provide practical experience during the training period.

Areas most mentioned as neglected in preservice training are: "legal as-These check-sheets were sent to the pects of school administration," "prosuperintendents as a preliminary step viding pupils services," "conducting a

equipment.

Most frequently mentioned discrepancies contributing to the preparation of superintendents are "law," "public finance," and "public speaking," it was

Seek American Standard for Usable Areas of Floor Space

NEW YORK. - A project to develop methods for determining usable areas in educational buildings as well as square footage of rentable areas in commercial buildings was approved January 4 by the American Standards Associa-

To determine whether such an American standard was desirable a canvass of school administrators and building owners was conducted earlier.

School administrators are faced with a difficult problem in trying to calculate the square footage of a building that is usable for educational purposes, the American Standards Association declares. The present methods of calculating the gross area of school buildings vary considerably, especially the calculation of areas in open corridors and passageways which are usable in some sections of the country where the climate is relatively mild but are not customarily usable where there is severe winter weather.

Also, the modern trend is to include a great deal of built-in cabinet space which, although usable, may or may not be considered part of the net usable

The U.S. Office of Education and the National Association of Building Owners and Managers are co-sponsors of the project under the procedures of the American Standards Association

Grade School Materials Exhibit Is Sent Abroad

WASHINGTON, D.C. - Because last year's foreign exhibit of American educational materials for children from the years of 2 to 6 was so successful, the Association of Childhood Education is again exporting an exhibit. It was previewed here January 23 by Washington and Baltimore educators.

This year's exhibit will include books, toys, play materials and teachers' manuals and is for children from 6 to 12. The State Department, which last year granted \$20,000 for the project, has increased the grant to \$30,000 and asked for elementary school materials to go to countries of the East.



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NEWS...

Says School Lunch Program Will Serve 1,500,000,000 Meals

WASHINGTON, D.C.—The Agriculture Department has predicted that the federal government will distribute a record 1,500,000,000 cut-rate but nourishing meals to 9,400,000 United States school children during 1952.

It will cost the taxpayers about \$83,-000,000 for the school lunch program, which is expected to provide 100,000,-000 more meals for 1,000,000 more children than last year.

Congress appropriated \$83,367,491 for the program this year, which is slightly less than last year's \$83,500,000. This does not reduce the amounts being apportioned out to states because the cut was made in administrative overhead costs.

For 1952, states are required to put up at least \$1.50 for every federal dollar received, in contrast to the first year of the program when the states were required to match these federal funds dollar for dollar. By 1963 they will be required to match each federal dollar with \$5.

Juvenile Book Authors Told to Stop Writing Half-Truths

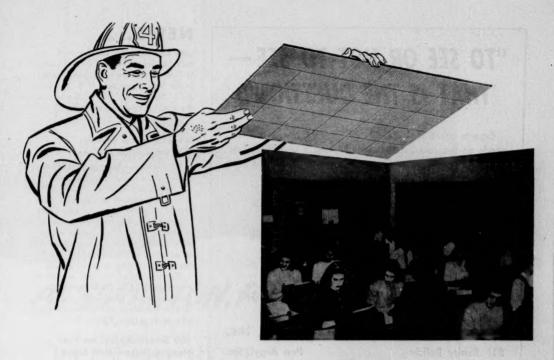
NEW YORK.—Authors of juvenile books were told to "stop writing half-truths" at a special meeting January 28 held by the junior book section of the Author's Guild of America in connection with the third national conference of the U.S. National Commission for UNESCO.

The meeting discussed ways by which authors of children's books can best express ideas of the United Nations in order to provide the next generation with knowledge and attitudes needed to make the most effective use of that organization. About 300 persons, including leading librarians, editors, authors, booksellers and educators attended.

"Writing with all the feeling in the world won't help toward understanding if you don't have the facts. All Eskimos don't build snow igloos," declared Dr. Ethel Alpenfels, a professor at the New York University School of Education.

Mrs. Lavinia Davis of Brookfield Centre, Conn., author of juvenile books and mother of six children, pointed out that books with feeling as well as with facts are needed, books that speak from the heart as well as the head.

"I'd like parents to come in and ask for some books on the U.N. with the



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NEWS...

same eagerness they ask for books on sex education and manners," said Eleanor Brent, consultant on children's books in the book department of R. H. Macy & Co., New York. "This [U.N.] hope of the world is close to the welfare of the child."

School Business Officials Plan Convention Program

KALAMAZOO, MICH. — Preliminary plans for the next annual meeting of the Association of School Business Officials include sectional meetings for plant maintenance and operation, schoolhouse planning and construction, purchasing, accounting and finance, and school revenue sources. Other program plans will be announced by the executive committee after a meeting in mid-February.

The convention this year will be at the Ambassador Hotel in Atlantic City, October 12 to 16. President is Ed. P. Williams, business manager for the public schools at Fort Worth. Tex.

500 Schools Appeal for V.A. Hearings Before New Board

WASHINGTON, D.C.—The Veterans' Education Appeals Board, set up by Congress in July 1950 to hear G.I. bill tuition disputes between the Veterans Administration and schools training veterans, has had a busy time during its brief year and a half of existence.

By the end of 1951, it had held 249 hearings and had rendered 203 rulings and decisions, many running well over a dozen pages. During the same period of time, schools had filed nearly 500 appeals with the board.

Seven Colleges Awarded Hillman Scholarships

ATLANTIC CITY, N.J.—Scholarships totaling \$15,000 will be distributed among seven educational institutions, trustees of the Sidney Hillman Foundation have announced.

The universities selected for the scholarships and the amounts are: Brandeis University, \$3000; Roosevelt College, \$2500; Amal-Histadrut School, Jerusalem, \$3500; Howard University, \$2000; the Education Foundation for the Apparel Industry, \$2000; New York School of Industrial and Labor Relations, Cornell University, \$2000, and Fisk University, \$1000.

A \$1500 grant-in-aid was also made to the Southern Regional Council, Inc., of Atlanta, Ga., race relations group.



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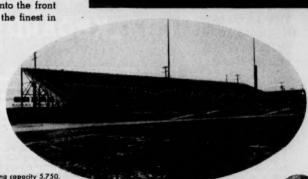
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New York State Organizes Citizens Commission

ALBANY, N.Y. - A State Citizens Committee for the Public Schools was formed here in New York State in January. The new organization has the support of the state department of education, the New York Education Association, and the New York State School Boards Association.

Thomas M. Linville, chairman of the city planning commission of Schenec-

lis of the National Citizens Commission for the Public Schools addressed the meeting, which was held at Albany.

To Set Up Clearinghouse on Life Adjustment Education

WASHINGTON, D.C. - Men and women from 20 states with action programs for life adjustment education will exchange ideas and information in Washington on March 17 to 19.

The meeting, the first of its kind, was tady, was named president. Leo M. Per- called by the Commission for Life Ad-

justment Education, a group functioning under the auspices of the U.S. Office of Education.

The delegates are expected to report how each state pays for its efforts to revise the secondary curriculum along life adjustment education principles. They will describe how local school systems plan changes in the high school curriculum; how they carry those changes into practice, and how they tell the people about them.

According to Galen Jones, head of the instruction, organization and service branch of the Office of Education, the results of the March conference will be summed up in a report to help school systems in all parts of the country introduce life adjustment innovations.

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Based on a $\frac{1}{4}$ " highly waterproofed, long fibre, presd-hardboard, the tough, double coated synthetic resin and silicate finish is baked on under high double coated synthetic resin and silicate finish is baked on under in a memperature, affording highest abrasive resistance and resulting in a amouth writing surface that permits perfect ease of writing and erasing. It does not warp, bulge, split, splinter, crack, craze or peel. No color change is possible from the use of strong soaps in cleaning the writing surface. No chalk pressure can dent or mar its smooth, hard and unbelievably dur-able writing surface. Rite Green Chalkboard by TYLAC meets every rigid Chalkboard requirement. It is CHALKBOARD PERFECTION.

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MONTICELLO, ILLINOIS

Would Abolish Independent **Accrediting Agencies**

WASHINGTON, D.C.-The National Commission on Accreditation, representing 1200 institutions of higher education, after more than a year of study, has recommended that 300 independent college accrediting agencies be eliminated

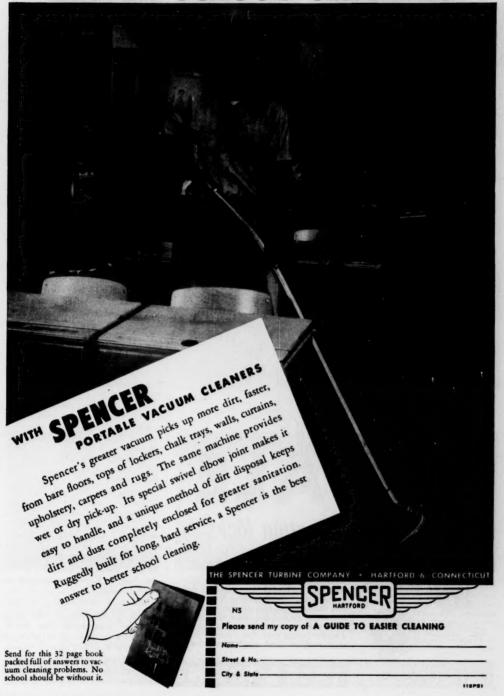
The commission has proposed instead that the six regional accrediting associations set up by the colleges themselves take over all accrediting and do it on an institution-wide basis.

Dr. Cloyd H. Marvin, president of George Washington University and secretary of the commission, cited 23 specific abuses by the accrediting agencies, some of which are as follows:

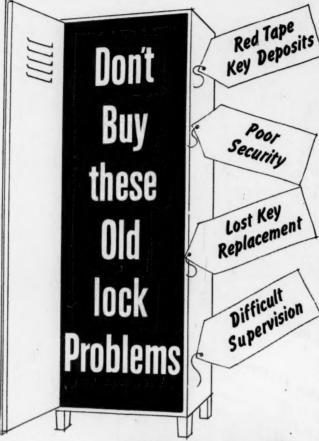
There are too many accrediting organizations. Originally starting as accreditation agencies for institutions, they are now down to departments and individuals. There is too much duplication, "vet all call for different data." He contended that they are breaking down the institutional rights and destroying the freedom of the faculties and interfering with the responsibilities of governing boards. Their charges and levies, he added, are excessive (affiliation running from \$10 to \$700), and in many cases they visit institutions without their being invited and then ask for a fee if the department or division is to be "white listed."

Dr. Marvin stated that the next move on the part of the National Commission on Accreditation will be the calling of conferences with regional accrediting associations and the independent groups "to try to work out an understanding that will be acceptable to all concerned."

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Save time...money

YALE built-in combination locks in your school will cut bookkeeping, save your staff valuable time, avoid annoying "lock outs." The YALE name on these trouble-free locks means you get real security, a full guarantee, a supervisor's key for easy access, and a master control chart that enables you to change any combination quickly and easily.

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NEWS...

National Educational TV Network Favored

ST. LOUIS.—More than 100 delegates from 29 cities and 19 states attended a conference here in January to consider the establishment and operation of a national noncommercial educational television network. Delegates included representatives from the Joint Committee on Educational Television and the American Council on Education.

The group was unanimous in support of the idea for a national educational TV network. Discussions revolved around the financial implications of an educational network, the programming possibilities, and the technical and engineering problems involved. Those in attendance agreed that a national educational TV network should produce programs in its own right as well as serve as a distribution center.

The conference commended the Federal Communications Commission for its tentative reservation of television channels for exclusively noncommercial use as established last March 22 and urged that in the public interest these reservations be made final.

TV Applications in New York Would Cover Entire State

NEW YORK.—If the Federal Communications Commission approves the state board of regents' request for 11 television outlets, New York will have a chain of educational television stations that "will reach 97 per cent of the people living in the state," states Dr. Lewis A. Wilson, state commissioner of education.

Dr. Wilson spoke at the eighth annual Institute of the Visual Arts held here recently.

Pointing out a reciprocal educational process, the commissioner declared that the great cultural resources of New York City could be brought to farms and Upstate communities that lack libraries, museums, art galleries and zoos and, in return, the "feeling of space, the great forests and orchards" of Upstate New York could be televised for the city's benefit.

"We must do something to help teachers see the value of audio-visual materials," asserted Dr. Paul W. F. Witt, associate professor of education at Teachers College, Columbia University. "We must work for the development of imaginative and resourceful teachers who are willing to try some-

American-Standard

First in heating...first in plumbing

New high school uses American-Standard plumbing fixtures throughout

● The Williamsville Central High School, in Williamsville, N. Y., meets every modern requirement of cleanliness and sanitation. It starts a long academic career with quality American-Standard plumbing fixtures that will give years of service with very little maintenance.

ance of American-Standard plumbing fixtures have been thoroughly tested in many schools throughout the country. And, you can choose from a complete line. Be sure to get all the facts from your architect or plumbing and heating contractor before you build or remodel.



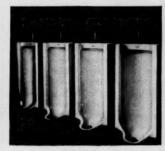
Architects: Duane Lyman & Associates, Buffalo, N. Y.

Plumbing contractor: Batt Co., Inc., Buffalo.

General contractor: The John W. Cewper Company, Buffale. Plumbing wholesaler: W. A. Case & Son Mfg. Co., Buffalo.



A lavatory in every classroom reduces hall traffic in the Williamsville school helps make each room a self-contained unit. Here is the Hibben lavatory, made of genuine vitreous china with non-tarnishing Chromard fittings.



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NEWS...

thing different," he said, in referring to the medium's "rich potentialities for learning."

Dr. Irene F. Cypher asserted that educators had failed to use radio as effectively as they might have done. The assistant professor of education at New York University warned educators to be on guard against a similar neglect of television. She said one of the main problems in the use of television is the inertia of teachers to change teaching methods and the "budget-makers who can't understand the need for new ma-

U.M.T. Hearings Show Some Widespread Opposition

WASHINGTON, D.C.-Two weeks of hearings held by the House armed services committee under the chairmanship of Rep. Carl Vinson (D.-Ga.) on the proposed National Security Training Corps Act (H.R. 5904) were concluded on the last day of January after 69 witnesses had appeared.

Analysis of the testimony indicates that, with the exception of the military establishment officials, the only groups unqualifiedly in support of the enactment of U.M.T. at this time are the various veterans' organizations. Opposition to U.M.T., on the other hand, stems from the religious, farm, labor and, to some degree, educational organizations.

Three Centuries of Textbooks Go on Exhibit at Harvard

BOSTON.-An exhibit of school books from the Colonial period to the present day was held in Widener Library at Harvard University concurrently with the convention of the Association for Supervision and Curriculum Development, February 10 to 14.

Many of the books are well known texts, such as the McGuffey Reader, published in 1837; Noah Webster's Reader and Speller, both published in 1782, and the "Short Introduction to the Latin Tongue" by Ezekiel Cheever known as "Cheever's Accidence," which was published in 1709.

For Exceptional Children

DETROIT.-To initiate a study on the qualifications and preparation needed by teachers of exceptional children, a national committee of leaders in special education met at Wayne University here on January 20 to 22. A grant of \$25,500 from the Association for the Aid of Crippled Children has made the study possible.

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Three Plans Offered for Military Service

WASHINGTON, D.C. - In order to meet the Selective Service's manpower problem "as it now exists and presumably will continue to exist for a decade or more," James B. Conant, president of Harvard University, and Arthur S. Adams, president of the American compulsory service for all physically fit Council on Education, proposed a new policy to replace current procedures.

Three alternative plans "for the coordination of higher education and compulsory military service" were suggested by Mr. Conant, head of the Educational Policies Commission of the National Education Association, and the executive committee of A.C.E.

One thing all three proposals have in common is the fact that they involve young men, with induction at 18 or 181/2. None permits exemption from

service, but all involve some type of deferment for college students.

The difference in the plans are these: Plan No. 1: Gives a "national specialized manpower board" authority to defer such college students as it might designate.

Plan No. 2: Makes deferment automatic until students finish college "provided an administrative agency shall have authority to determine the limits as to individual qualifications, duration of education or training and area of education or training to be applied from time to time.'

Plan No. 3: Permits deferment only for students "enrolled in an expanded system of R.O.T.C. programs providing the flow of trained personnel needed by the armed forces."

Dr. Conant said the document is not concerned with Universal Military Training, but "with the problem of military service for the kind of world that requires the United States to have up to 5,000,000 men in the armed forces," or partial mobilization.

"The morale of students is very bad under the present system. There is uncertainty; they don't know their present responsibility or future functions. Our alternative is not to defer more students but to provide a clear-cut plan," he said.

Qualifications for Teachers of Exceptional Children Studied

WASHINGTON, D.C.—The chief emphases of a new study the U.S. Office of Education will sponsor this year will be upon the qualifications of teachers of exceptional children and the curriculums of colleges offering courses for such teachers, Earl J. McGrath, U.S. commissioner of education, declares.

The study has been made possible by a grant of \$25,500 from the Association for the Aid of Crippled Children and is expected to extend over a period of one year. Progress reports and publications presenting study findings will be issued during the year.

Such questions as the following will be under consideration: What makes an effective teacher in this field? What special functions do such teachers perform? Which of these functions are common with those of other teachers? Which are distinctive? How can state and local standards contribute to the development of effective teachers? What is the relationship between standards for certification of teachers and opportunities for preparation?



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Kellogg Fund Makes Grant to Canadian Education Project

TORONTO, ONT.—The W. K. Kellogg Foundation recently gave the Canadian Education Association the first installment of a total grant of \$231,000 to carry out a five-year program designed to improve educational leadership and supervision in Canada.

The C.E.A. will have the cooperation of the various provincial departments of education and the University of Alberta.

Basic to the program will be a series of three-week workshops or short courses for superintendents to inform these key persons of the purposes of the program and to explore the assistance that can be obtained from them and from other resource persons, such as psychologists, sociologists and officials skilled in administration and workshop methods. These workshops will be held at the University of Alberta under the guidance of a specially trained staff and consultants.

The chief purposes of the project are: (1) to clarify the functions of superintendents or inspectors of larger school areas; (2) to work out practical solutions to problems now being encountered; (3) to formulate knowledge and material based on Canadian experience in school administration and supervision; (4) to encourage the establishment at the University of Alberta of a program of preservice and in-service training in supervision and administration, and (5) to develop principles and procedures designed to improve Canadian school administration in general.

A special feature will be the development of new technics of evaluation and the constant use of these to evaluate the program's effectiveness. Another feature will be the employment of an expert in communications who will advise on methods of transmitting ideas and of achieving good public relations.

A program director with a staff of four located at the association office in Toronto will organize and coordinate the program under a special committee of the C.E.A. Dr. W. H. Swift, deputy minister of education at Alberta, has been chosen chairman of the committee.

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"Most Pressing Needs" of Education Are Listed

New YORK. — The war mobilization program has left its impact upon the nation's public schools, wrote Benjamin Fine, reporting on a nation-wide survey made by The New York Times.

The most "pressing needs" of education, as listed by the nation's state education commissioners, are: (1) more and better school facilities; (2) more and better teachers; (3) more financial support for education, particularly from the local community; (4) better salaries for teachers and administrators to attract personnel to the field; (5) the reorganization and consolidation of school districts, particularly in rural areas; (6) smaller classes to reduce pupil-teacher ratio; (7) special services for exceptional children; (8) more supplies so that children can get the full benefit of the school curriculum; (9) more and better school transportation in rural areas, and (10) better working conditions for all school employes.

Some educators, reported Mr. Fine, estimate that education should receive about twice what it spends now—a total of \$10,000,000,000 for operating expenses.



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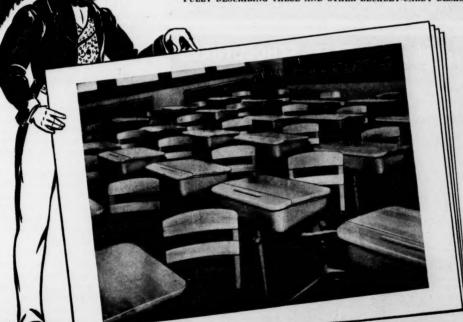
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NEWS...

Yearbook Deals With Rural Life and Education

CHICAGO. — Entitled "Education in Rural Communities," the 51st yearbook of the National Society for the Study of Education came out in early February.

Ruth Strang was chairman of the yearbook committee; other members were John S. Carroll, Francis S. Chase, Shirley Cooper, Lowry Nelson and Kate V. Wofford. The volume was edited by Nelson B. Henry, secretary-treasurer of the society.

The yearbook describes (1) the most important trends in rural life and analyzes their influence on rural education: (2) pictures the good that education is accomplishing in a few rural communities; (3) gives the best up-to-date factual information about rural education as it is today; (4) describes the processes and paths that lead to improvement; (5) describes cooperative efforts to improve rural schools on local, county, state, regional, national and international levels; (6) proposes methods for evaluating the effectiveness of education in improving rural life; (7) states briefly essential first steps toward better education in every rural community and the need to look ahead to problems still to be solved.

The book is distributed by the University of Chicago Press.

Brooklyn Schools Show Science in Action

BROOKLYN, N.Y.—Fourteen thousand sixth, seventh and eighth grade pupils of school districts 25 and 27 during February, March and early April are or will be viewing an exhibit of the rôle of science in "The World at Work" at the Brooklyn Children's Museum.

Developed by the museum, the board of education's division of curriculum, the vocational high schools, and the field superintendent and staff of the two districts, the exhibit is being visited as a part of regular class work.

The youngsters "see" their voices on an oscilloscope, hear their heart beats on an amplifying device, watch the principles of radar in action, and view many other scientific demonstrations.

The exhibit is the first of a series designed to show the application of scientific principles in the world of work. It shows upper grade pupils how high school classroom subjects can help prepare for profitable and interesting life vocations.



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Whitney Money for **Teacher Graduate Fellowships**

NEW YORK .- Under a new program sponsored by a \$600,000 grant from the John Hay Whitney Foundation, five small independent colleges that cannot ordinarily afford unusual teaching talent will have the services for at least a year of outstanding professors who have reached retirement age at other institutions, it was announced.

The program goes into effect next September and continues for three years.

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The grant also will include a plan to improve secondary school teaching through annual awards of graduate fellowships to 20 teachers in public high schools over the country. The teachers, who must be teaching in the fields of languages, literature, social studies or the arts, will be nominated by their superintendents or other officials. Those chosen will enroll in a special seminar and certain courses of their own choosing at Columbia or Yale universities. the colleges selected for the first year.

The pilot states are: New York, New Jersey, Georgia, Kentucky, Tennessee, Colorado, Kansas, Nebraska, Oregon and Washington.

Dr. Harry J. Carman, dean emeritus of Columbia College and chairman of the foundation's humanities division, said that in the first year five or six retiring professors would be selected to teach at the small institutions and that a new group of professors and colleges would be chosen each year with the possibility of expanding participation.

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New York High Schools Will Use Radio-Isotopes

NEW YORK .- New York City's high school science teachers will be the first in the nation to use radio-isotopes in classroom demonstrations next fall, Dr. William Jansen, superintendent of schools, has announced.

To prepare the teachers with sufficient technical knowledge an advisory group from the Atomic Energy Commission, Brookhaven National Laboratory, and the board of education have planned a 15 week course starting February 27 at New York University entitled "Radio-Isotopes—A New Aid to High School Teachers."

Four elements that the teachers will use in their classroom demonstrationsiodine, phosphorus, sodium and cobalthave been declared safe for classroom use by the A.E.C.

In a letter to Dr. Jansen, Gordon Dean, A.E.C. chairman, praised the board for the plan and said "as we all realize, the shortage of engineers and scientists in this country is a serious problem, and I feel sure that the actual use of radio-isotopes in the classrooms of New York City next September will go a long way toward creating student interest in atomic energy as a possible career."

Must Convert From Steel to Masonry for New Buildings

NEW YORK .- By next September the demand for new schools probably will reach its peak, with an additional 1,-700,000 enrollment expected.

The steel shortage will so defer school projects all over the country that some of them may not come off the shelf until 1953 or 1954, says Engineering News-Record.

The construction industry will have a big job to do once the steel situation eases or schools get priority.



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161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. Accommodates bodies of 30- to 36-pupil capacity. Chevrolet Thriftmaster valve-in-head engine, 92-h.p., 176 foot-pounds torque (pulling power) under 35 m.p.h. governed speed. Twin-Action rear brakes. Dual-Shoe parking brake.

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Schools Get \$3,000,000 From Montana Oil Leases

HELENA, MONT. — As a result of an oil boom in the Williston Basin of eastern Montana and western North Dakota, the public schools of Montana will receive more than \$3,000,000.

The State Land Board recently approved the leasing of 260,000 acres of state owned oil and gas land in the Montana section of the Williston Basin for a total of \$3,315,428 and, under the state law, 95 per cent of the money

will go into the interest and income fund which is available to the public school system. The remaining 5 per cent will go into the permanent school fund, to be invested and the interest to be used for school purposes. Distribution of the 95 per cent will provide about \$20 for each pupil in the state.

If any of the firms that bought leases on the state land should strike oil or gas, the state also receives 12½ per cent royalty, which would go into the permanent fund also.

NAMES IN THE NEWS SUPERINTENDENTS...

Warren Travis White was unanimously reelected schools at Dallas, Tex., for a five year term. His present contract expires August 31. Mr. White's salary was boosted to \$17,500 a year, an increase of \$1000. He is immediate past president of the American Association of School Administrators.

Lyman M. Fort has resigned as superintendent of schools at Sioux Falls, S.D., a post he has held for the last eight years.

H. E. Ilsley, former superintendent of the consolidated schools at Spirit Lake, Iowa, has been renamed superintendent to fill out the school year for the late H. A. Mahannah.

Neil J. Geary has been named superintendent of schools at Weehawken, N.J., succeeding Urban W. Chase, who has been appointed superintendent of schools of Hudson County, New Jersey. Dr. Geary, who has held the post of assistant superintendent of schools at Ridgewood, N.J., for more than five years, has been assisting in the planning of two new elementary schools in Ridgewood for the last two years. He also served as elementary school principal and secondary school principal and for the last 18 years has taught teacher education courses in New Jersey State Teachers Colleges.

Ruth N. Robinson has been appointed superintendent of the school at Havana, Ark., succeeding E. W. Cook, who has been named superintendent at Mansfield, Ark

Clyde Edgar Johnson succeeds I. J. K. Wells as state superintendent of Negro schools for West Virginia.

Marjorie B. Leinauer, superintendent of DeKalb County schools in Illinois since 1940, has been elected president of the Department of Rural Education of the National Education Association,



Mrs. Leinauer

succeeding W. A. Early, county superintendent of schools, Arlington, Va. Mrs. Leinauer will take office March 1.

Carl V. Warren, superintendent of schools in Union School District 3, Huntington, L.I., New York, has had his contract renewed for five years.

Bertram M. Jones has been named

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STEELE pioneers again with the greatest innovation in modern public building shading!

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superintendent of schools at Sabula, Iowa, succeeding Paul J. Voskuil. Mr. Voskuil resigned to accept a post in the Iowa Department of Public In- nia.

Hobart M. Corning has been reappointed superintendent of schools at Washington, D.C.

SUPERVISING PRINCIPALS ...

Harry S. Ruhl resigned as principal of the Hanover Junior High School, Hanover, Pa., to accept the supervising

principalship of the schools of Danville, signed for reasons of health, has been Pa. He succeeds C. D. Jenkins, who is now assistant superintendent of schools the finance administration division of in Northumberland County, Pennsylva-

PRINCIPALS ...

Frederick E. Carver succeeds William R. Brewster as headmaster of Kimball Union Academy, Meriden, N.H. Mr. Carver has served as assistant headmaster and also as director of admissions. Since 1939 he has been coach of both football and baseball. Mr. Brewster, who renamed director of public relations.

Charles E. Clear has assumed his new duties as principal of the Rural Retreat High School in Wythe County, Virginia. His former post was as principal of the Sugar Grove High School, Sugar Grove,

John B. Pilette has been appointed principal of the Vernon-Verona-Sherrill Junior-Senior High School at Vernon, N.Y. He formerly was supervising principal of the Brownville-Glen Park Central School at Brownville, N.Y.

Louis Andrew Berger has assumed his new duties as principal of the Lafayette High School at Lafayette, La. He had been a teacher of vocational agriculture in the school.

IN THE COLLEGES ...

Earl E. Mosier will take office March 1 as dean of professional education at Michigan State Normal College, Ypsilanti, Mr. Mosier had been a member of the Michigan State De-



partment of Public Instruction for 14 years. He served as assistant superintendent for instruction from 1946 to 1950, and earlier as chief of the division of teacher education and certification. associate director of the Michigan Cooperative Teacher Education Study, consultant in secondary education, and staff member of the Michigan Study of the Secondary School Curriculum. For the last two years Mr. Mosier has been associate professor of educational administration and associate director of research for the Midwest Cooperative Program of Educational Administration at the University of Chicago.

William Samuel Carlson on April 1 will assume his new duties as the second president of the State University of New York. Dr. Carlson, now president of the University of Vermont, succeeds Alvin C. Eurich, who resigned September 1 to become vice president of the Ford Fund for the Advancement of Education. Charles Garside, a member of the state university's board of trustees since the university was established in 1948, has been acting as president since September and will continue in that capacity until Dr. Carlson takes office.



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NEWS ...

Jonathan W. French Jr. is the new president of Emerson College, Boston. Since 1950 he has been dean at the college. Mr. French also has been dean of men and assistant director at the Brunswick campus of the University of Maine.

Raymond B. Allen, former president of the University of Washington, has been appointed the first chancellor of the University of California at Los Angeles. Dr. Allen already had resigned his post at the University of Washington, effective December 30, to become director

of the Psychological Strategy Board in Washington, D.C.

Matthew J. Whitehead, former assistant registrar and associate professor of education at Howard University, is now professor of education and head of the division at Miner Teachers College, Washington, D.C.

Harvey L. Turner has resigned as president of Hillsdale College, effective August 31, although he will continue as secretary-treasurer of the Michigan Colleges Foundation, a fund-raising organization of small colleges. Mr. Turner also was given a leave of absence from the college, beginning February 1.

J. Donald Phillips, vice president of the school and director of human relations, has assumed Mr. Turner's duties temporarily.

Willard C. Olson, professor of education at the University of Michigan, has been appointed dean of the university's school of education, effective February 11. Dr. Olson succeeds James B.



W. C. Olson

Edmonson, who has been dean since 1929 and a member of the faculty since 1914. Dr. Olson, who is widely known for his research work in the growth patterns and mental development of children, has been director of research in child development at the University Elementary School since 1929. He also served as associate professor of education in the school of education from 1929 and was promoted to the rank of professor in 1935. During the last three years he has been president of Phi Kappa Phi, the Society for Research in Child Development, and the American Educational Research Association. Before going to the University of Michigan in 1929, Dr. Olson had been principal and superintendent of two high schools in Minnesota and instructor and assistant professor at the University of Minnesota. He is a native of Minnesota and a graduate of the University of Minnesota.

Dean Edmonson, an authority on citizenship education, began his career as a high school teacher and then became professor of secondary education at the University of Michigan. An au-



Dean Edmonson

thor, lecturer, administrator, consultant and adviser, he was a member of the National Committee on Emergency in Education from 1933 to 1935, and the Educational Policies Commission of the National Educational Association from 1935 to 1944. He also has served as president of the North Central Association of College and Secondary Schools, of the National Association of High School Inspectors, of the Horace Mann League, of the State Teachers Retirement Fund, and of the Michigan School

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NEWS...

sultant board for The NATION'S SCHOOLS since August 1931.

John Theodore Rettaliata has been appointed president of the Illinois Institute of Technology, effective February 4. He also was appointed president of two other organizations on the Illinois Tech campus-the Armour Research Foundation and the Institute of Gas Technology. He succeeds Henry Townley Heald, whose appointment as chan-

masters' Club. Dean Edmonson has cellor of New York University was been a member of the editorial con- announced in December. Vice president in charge of academic affairs at the institute since October 1950, Mr. Rettaliata has been dean of engineering since September 1948. He joined the Illinois Tech staff in 1945 as director of the department of mechanical engineering.

> Merlin C. Wolfe, a former superintendent of schools at St. Joseph, Mich., has been named to the faculty of Michigan State Normal College.

Donald Stuart Russell will become president of the University of South Carolina on June 3. Mr. Russell will succeed R./Adm. Norman M. Smith, who has headed the university since 1944. Mr. Russell, a former practicing lawyer, was at one time connected with the war department.

OTHERS ...

James F. Redmond has been appointed purchasing agent for the Chicago schools. Mr. Redmond, who has been acting purchasing agent for the last 15 months, formerly was administrative assistant to





Herold C. Hunt, general superintendent of the Chicago schools, and also served under Dr. Hunt when he was superintendent of schools in Kansas City, Mo. Lester I. Schloerb will succeed Mr. Redmond as administrative assistant. Mr. Schloerb, who has 30 years' experience in the Chicago schools, is a former director of the bureau of pupil welfare.

Charles A. Bucher, associate professor of Education of the school of education, New York University, has been appointed chairman of the New York State five-year program professional preparation committee in physical education, which was established to set up standards for the training of physical education teachers in New York State.

DEATHS . . .

William Louis Bourgeois, superintendent of schools at Southbridge, Mass., from 1946 to Aug. 1, 1950, died in December. Mr. Bourgeois formerly taught at Boston Latin School, Boston, and also was superintendent of schools in Jewett City, Conn., before he went to Southbridge. For the last year he had been a graduate student at the Boston University School of Education where he had completed his course requirements for his doctor of education degree.

L. T. Lanier, superintendent of schools at Mansfield, Ark., for about four years, died recently. Mr. Lanier previously served as county school supervisor of Sebastian County, Arkansas.



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Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

Cooperative Program in Educational Administration. Middle Atlantic Region. First annual report. Daniel R. Davies, coordinator. Teachers College, Bureau of Publications, Columbia University, New York 27. Pp. 85.

Local Public School Administration. By Ben-jamin Floyd Pittenger, graduate professor of educational administration, University of Texas. McGraw-Hill Book Co., 330 W. 42d St., New York 18. Pp. 512. 34.75.

Opportunities for Education in the Next Decade. Compiled and edited by E. T. Mc-Swain, dean, School of Education, Northwestern University, and Jack R. Childress, director, the University College. Northwestern University.

Proceedings of the cooperative conference for administrative officers of public and private schools, Northwestern University the Univer-sity of Chicago, University of Chicago Press, 5750 Ellis Ave., Chicago 37. Pp. 112, 38.25. Community Uses of Public School Facilities. By Harold H. Punke, King's Crown Press, Co-lumbia University, New York City 27. Pp. 247, 38.45.

247. 33.45.

Practical School Board Procedures. By Daniel R. Davies and Elwood L. Prestwood, both associated with the cooperative program in educational administration, Teachers College, Columbia University. Analyzes and summarizes actual reports of best practices from 285 boards of education in all 48 states, which were selected for their recognized accomplishments. Chart

well House, Inc., 280 Madison Ave., New York 16. Pp. 195.

Educational Supervision. By Chester T. McNerney, department of education, Pennsylvania State College. Emphasizes advantages of democratic group action within school and community organizations but attention also is given to handling individual teacher problems. Mc-Graw-Hill Book Co., 330 W. 42d St., New York 18. Pp. 341. \$4.

KINDERGARTEN

NINDERGARIEN

Portfolio for Kindergarten Teachers. 1951 revised edition. Short talks by 12 teachers on such subjects as music, parent conferences, dramatic plays, the program, and housing and furnishings. Association for Childhood Education International, 1200 15th St., N.W., Washington 5, D.C. Pp. 48. 75 cents.

LIBRARIES

A Planning Guide for the High School Library Program. By Frances Henne, associate profes-sor, Graduate Library School, University of Chi-cago, Ruth Ersted, state supervisor of school libraries, Minnesota Department of Education, libraries, Minnesota Department of Education, and Alice Chorer, assistant professor, Library School, University of Illinois. Pertains primarily to libraries in high achools with grade ranges of 9-12 or 10-12, although it may also be used in achool libraries serving grades 7-12. American Library Association, Chicago. Pp. 140.

Elementary-School Libraries Today. Presents 51 short articles on organising and operating effective elementary school libraries. N.E.A., 1201 16th St., N.W., Washington 6, D.C. Pp. 415. \$3.

SPECIAL EDUCATION

Education of Visually Handicapped Children. Bulletin 1951, No. 20. By Romaine Mackie, spe-cialist, schools for physically handicapped, in collaboration with five others. U.S. Government Printing Office, Washington 25, D.C. Pp 46.

GENERAL EDUCATION

Teaching Is Exciting! By Margaret Wasson, director of instruction, Highland Park Public Schools, Dallas, Tex. Prepared as a result of scholarship awarded by national Delta Kappa Gamma Society. Bulletin No. 38 of the Association for Childhood Education International, 1200 15th St., N.W., Washington 5, D.C. Pp. 38, 75

Anthology in Educology. By Lowry W. Hard-ing. A collection of humorous poetry con-cerning education. Wm. C. Brown Company, Dubuque, Iowa. Pp. 78. \$1.50.

PUBLIC RELATIONS

How Can We Help Get Better Schools? The findings of a two-day workshop conference. Na-tional Citizens Commission for the Public Schools, 2 W. 45th St., Dept. M., New York 19.

RURAL SCHOOLS

Modern Ways in One- and Two-Teachér Schools. By Effig G. Bathurst and Jane Fran-seth, division of state and local school systems. Bulletin 1951. No. 18. Helps teachers on their first jobs and those serving during shortages of regular teachers in small schools. The discus-sion emphasizes teaching procedures, selection of experiences, planning, evaluation, and coopera-tive activities. U. S. Government Printing Of-fice, Washington 25, D.C. Pp. 48. 20 cents.

SCHOOL PLANT

School Planning. 1951 Stanford conference on school plant planning. By J. D. MacConnell, associate dean, School of Education, Stanford University, Stanford, Calif. Pp. 142. 34.

University, Stanford, Calif. Pp. 142. 34. Planning Elementary Buildings for School and Community Use. By Arthur W. Clevenger, professor of education. Emphasizes the planning and construction of small elementary school buildings for both school and community use. Bureau of Research and Service, College of Education, University of Illinois. Pp. 52.

Yearbook of School Law, 1951. By Lee Garber, School of Education, University Pennsylvania, Philadelphia. Pp. 89. \$2.25.



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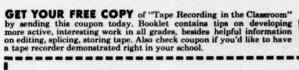
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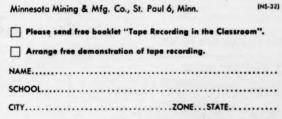
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CURRICULUM

The Curriculum in Health and Physical Edu-cation. Second edition. By Leslie W. Irwin, professor of health and physical education, School of Education, Boston University. C. V. Mosby Co., 3523 Pine St., St. Louis. Pp. 382. 34.

Mosey Co., 2622 Pine St., St. Louis. Pp. 382. 54. Educating the Retarded Child. By Samuel A. Kirk, professor of special education, University of Illinois, and G. Orville Johnson, assistant professor of special education, University of Illinois. Houghton Mifflin Co., 2 Park St., Boston. Pp. 434.

Boston. Pp. 484.

The Activity Period in Public High Schools.
Bulletin 1951, No. 19. By Ellsworth Tompkins, specialist for large high schools. Data based on replies from 10,925 public high schools to inventory of offerings and enrollments in

high school subjects. Order from U.S. Government Printing Offi Pp. 17. 15 cents. Office, Washington 25, D.C.

Joint Council on Economic Education, 1948-51. Summary report of the philosophy and activities of economic education movement, classified alphabetically by states. 444 Madison Av., New York 22. Pp. 58.

York 22. Pp. 58.

Making the Cere Work, How-to-do-it manual by Leon Ovaiew and a committee of teachers from the schools of Elisabeth, N.J., who have been experimenting with core curriculums in the junior high schools of the city. Metropolitan School Study Council, S25 W. 120th St., New York 27. Pp. 53. 83 cents.

Hew Children Learn to Think, Bulletin 1951, No. 10. By Paul E. Blackwood, Gives illustra-

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ENGINEERED

tions of children at work in the classroom and how some principles about thinking and prob-lem solving are identified. U.S. Government Printing Office, Washington 25, D.C. Pp. 19.

15 cents.

How Children Learn About Human Rights.
Bulletin 1951, No. 9. U.S. Office of Education. By Wilhelmina Hill and Helen K. Mackintoah, Concerned with the concept of human
rights, and the interpretation of some of these
rights in the classroom, in the school, at home,
and in the community, U.S. Government Printing Office, Washington 25, D.C. Pp. 16. 15

Culioden Improves Its Curriculum. Bulletin 1951, No. 2. By Lucille McGraw Richmond and Effie G. Bathurst. Tells how students and staff of the elementary school at Culioden, W. Va., developed their curriculum. U.S. Government Printing Office, Washington 25, D.C. Pp. 24.

You Can Read Better, Junior life adjustment You Can Read Better. Junior life adjustment booklet. By Paul Witty, professor of educa-tion and director of the psycho-educational elinic, Northwestern University, and Harry Bricker, Atlanta Area Tencher Education Serv-ice, Emory University. Discusses basic prin-ciples of fluent reading. Science Research Associntes, 57 W. Grand Ave., Chicago 10. Pp. 40

Exploring Atomic Energy. Junior life adjust-ment booklet. By John Lewellen. Describes how a group of upper elementary grade boys and girls learned about atomic energy. Science Re-search Associates, 57 W. Grand Ave., Chicago 10. Pp. 40. 40 cents.

GUIDANCE

GUIDANCE
The School Counseier: His Work and Training. California State Department of Education. Frepared by Donaid E. Kitch and William H. McCreary. Represents current thinking of school people within the state as to the rôle of the school counseior. California State Department of Education, Sacramento. Pp. 44. Stadent Councils for Our Times. Principles and Practices. By Joe Smith. Bureau of Publications, Teachers College, Columbia University, New York. Pp. 110. \$2.

When Children Statt Dating. By Edith G.

New York, Pp. 110, \$2. When Children Start Dating. By Edith G. Neisser. Aids parents and teachers to understand the different stages of adolescence. Science Research Associates, 57 W. Grand Ave., Chicago 10. Pp. 49. 40 cents.

10. Pp. 49. 40 cents.

Guiding Children's Social Growth. By Ellis
Weitzman, director of student personnel and
professor of psychology and measurements,
American University. Tells how parents can
help children in acquiring social maturity at
home, how teachers can help at school. Science
Research Associates, 57 W. Grand Ave., Chicago
10. Pp. 49. 40 cents.

Occupations. A basic course for counselors.
By Walter J. Greenleaf, specialist, Occupational
Information and Guidance Service. U.S. Government Printin Office. Washinston 25. D.C. Pp.

ment Printing Office, Washington 25, D.C. Pp.

HEALTH AND PHYSICAL EDUCATION

HEALTH AND PHYSICAL EDUCATION
School Health Services. Sponsored jointly
by the National Council of Chief State School
Officers and the Association of State and Territorial Health Officers. Defines suitable programs
of school health services and describes how state
and local education and health agencies may
work together to achieve them. National Council of Chief State School Officers. 1201 16th St.
N.W., Washington, D.C. Pp. 51. 25 cents.
Physical Education — Foundations and Principles. By Clifford Lee Brownell, chairman,
department of health, education and physical
education, and E. Patricia Hagman, associate
professor of health and physical education,
Teachers College, Columbia University. McGraw-Hill Book Co., 330 W. 42d St., New York
Is. Pp. 395, 34.59.
Bedy Dynamics. By Eleanor Metheny, professor of education and physical education,
University of Southern California, Describes
ways in which physical condition of the body
may be improved by appropriate exercises and
discusses modern principles of posture, movement, and relaxation for efficiency in work and
play. McGraw-Hill Book Co., 330 W. 42d St.,
New York 18. Pp. 225. 33.50.
Teachers Contribute to Child Health. Bulletin
1951, No. 8. By Elsa Schneider and Simon A.
McNeely. Discusses school health program,
school health services, healthful school environment, healthful school living, and health instruction. U.S. Government Printing Office, Washington 25, D.C. Pp. 44. 20 cents.

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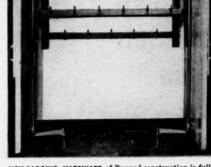
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COMING EVENTS

Meeting dates for national and regional programs

cation, Fargo, N.D.

17-20. Institute for Education by Radio and Television, Columbus, Ohio.

trative Leadership Serving Community Schools, N.E.A. Department of Rural Edu-

21-23. Great Lakes Conference on Rural Life and Education, N.E.A. Department of Rural Education, University of Wisconsin,

20-22. Midwest Conference on Adminis-

FEBRUARY

21-23. American Association of Colleges for Teacher Education, N.E.A., Chicago.

22-23. National School Boards Association. St. Louis.

22-25. Annual Meeting, N.E.A. Department of Rural Education, St. Louis

23-27. Regional Convention, American Association of School Administrators, St. Louis

23-27. Regional Convention, National Society for the Study of Education, St. Louis.

23-27. Winter Meeting, Department of Classroom Teachers, N.E.A., St. Louis.

25. Regional Convention, National School Public Relations Association, St. Louis.

25-26. Regional Meeting, American Educa-tion Research Association, N.E.A. St. Louis.

Madison. 27-May 1. Eastern Regional Conference, American Association for Health, Physical Education and Recreation, N.E.A., Portland,

30-May 3. American Industrial Arts Association, N.E.A., Chicago.

30-May 3. International Council for Exceptional Children, Omaha.

MARCH

8-10. Area Meeting, N.E.A. Department of Rural Education, Los Angeles.

8-12. Regional Convention, American Association of School Administrators, Los Angeles

8-12. Regional Convention, National Society for the Study of Education, Los Angeles.

10. Regional Convention, National School Public Relations Association, Los Angeles.

10. Regional Meeting, American Educational Research Association, Los Angeles. 13-15. Annual Conference, Missouri Valley

Adult Education Association, Omaha, Neb. 17-19. Midwest Regional Conference, American Association for Health, Physical Education and Recreation, N.E.A., Cincin-

20-22. Southeastern Association of School Business Officials, Atlanta, Ga.

31-April 3. Annual Convention, National Association of Deans of Women, Los An-

APRIL

5-7. Area Meeting, N.E.A. Department of Rural Education, Boston.

5-9. Regional Convention, American Association of School Administrators, Boston.

5-9. Regional Convention, National Society for the Study of Education, Boston.

6-10. Annual Meeting, American Association for Health, Physical Education and Recreation, Los Angeles.

Regional Convention, National School Public Relations Association, Boston.

7. Regional Meeting, American Educational Research Association, Boston.

10-11. Midwest Conference on Rural Life and Education, Sioux Falls, S.D.

13-15. Southwest Regional Conference, Administrative Leadership Serving the Com-munity Schools, Tulsa, Okla.

14-18. Study Conference of the Associa-tion for Childhood Education International, Philadelphia.

16-19. National Conference on Higher Education, Chicago.

JUNE

16-19. National Association of Student Councils of the National Association of Secondary-School Principals, Evanston, Ill.

26-July 1. N.E.A. Department of Elementary School Principals, Detroit.

30. Annual Meeting, N.E.A. Department of Classroom Teachers, Detroit.

30-July 5. National Education Association,

JULY

7-18. Ninth Classroom Teachers National Conference, N.E.A. Department of Classroom Teachers, Michigan State Normal College, Ypsilanti, Mich.

12-15. Seventh National Conference of County and Rural Area Superintendents, New York City.

12-16. Association of School Business Officials of the United States and Canada, Atlantic City, N.J.

Atomic-Bomb Film Gets School and Club Showings

NEW YORK. - Children in the city's public, private and parochial schools here will view a 10 minute film instructing them in the precautions to take in case of an atomic-bomb attack, announced John C. Cocks, civil defense administrator of the board of educa-

The 16 mm. film, entitled "Duck and Cover," is the first on civil defense to be endorsed by the National Education Association and is said to be the first 'nonhorror" film about the atomic bomb. It is part animation and part live action.

Fifty-eight copies have been purchased for school use by the Office of Civil Defense, and more than 700 have been shipped to various schools and organizations throughout the country.



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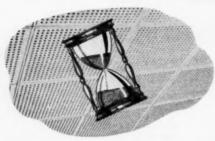
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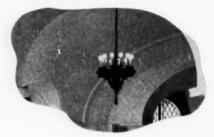
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Interesting facts about acoustical materials







How long are acoustical materials effective?

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Why are some materials perforated and others "fissured"?

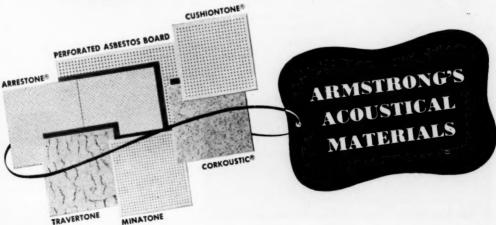
Acoustical materials have surface openings where sound may enter and be absorbed. Materials like Armstrong's Cushiontone, with geometric perforations, offer high efficiency at lowest cost. Fissured materials like Travertone have been designed for interiors where unusual beauty is required.

Can acoustical ceilings be applied to curved surfaces?

Because acoustical materials are made in small tile form, they can be cemented directly to surfaces where the curve is very gradual. Where the material itself must actually bend, however, Armstrong's Corkoustic is recommended. Corkoustic, made of pure cork, offers some flexibility.

FREE BOOKLET: "How to Select an Acoustical Material" answers many questions about sound conditioning. Write Armstrong Cork Company, 3703 Stevens Street, Lancaster, Pennsylvania.







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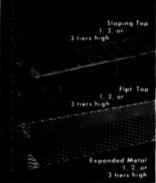
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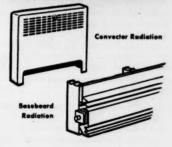
For further information on Dunham Fin-Vector Radiation, write for Bulletin 1251-15. Similar literature available on other products.

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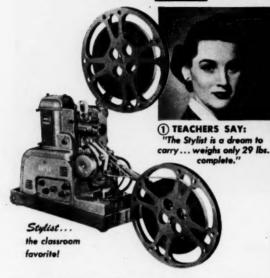
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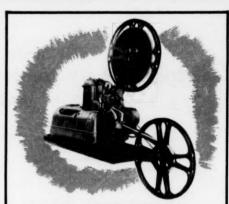
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never need painting or re-decorating. Produced in modular sizes, Natco Ceramic Glazed Vitritile builds a wall and finish at one time — goes up fast — saves construction time and cost. The wide variety of attraction time and cost. tive, enduring finishes available enabled the architects to select the color best suited for the purpose from both an appearance and functional standpoint.

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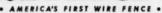
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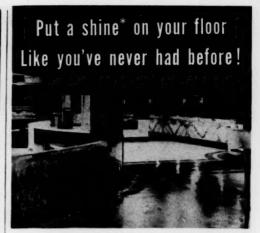




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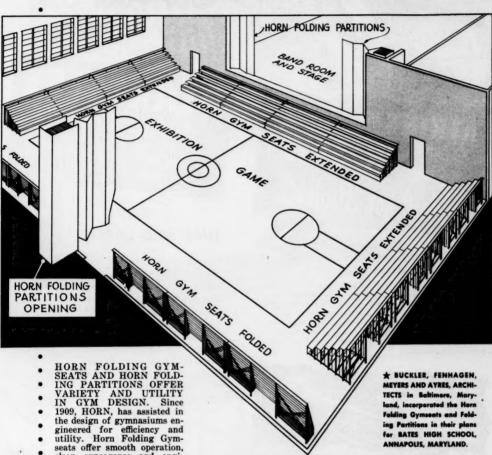
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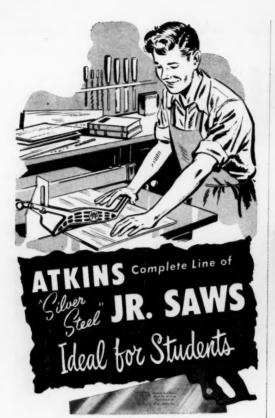
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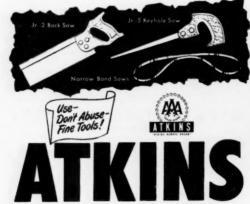
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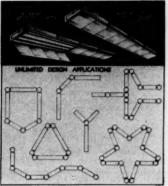
What's New FOR SCHOOLS

MARCH 1952

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 192. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Hinged Lens Plexoline



Plexoline fixtures have been in use in quality illumination installations for approximately two years. Day-Brite engineers have now developed a modification of the Plexoline-2 fixture which has a separable hinging arrangement which allows hinging from either side or complete removal for maintenance. Known as the Hinged Lens Plexoline, the new unit is available for either Slimline or fluorescent lamps: an 8 foot unit for two 40-watt fluorescent lamps, and an 8 foot unit for four 40-watt fluorescent lamps.

Hot-bonded super-white enamel is used to finish enclosure and chassis of the fixture. The ribbed glass side panels are of Albalite glass, which has a low surface brightness and a high light transmission quality. The new Hinged Lens Plexoline is recommended for surface mounting only and top reflector plates are furnished for 100 per cent direct distribution of light.

A continuous line of low brightness light with no straps or couplings to throw dark shadows across the lens is provided by the new unit when used in continuous runs. By combining the Hinged Lens Plexoline, the Plexoline-2 circular units and the adapters, unlimited patterns can be formed to suit the lighting to the individual installation. Day-Brite Lighting, Inc., Dept. NS, 5451 Bulwer Ave., St. Louis 7, Mo. (Key No. 506)

Wear-Ever Double Boilers

The new Wear-Ever Aluminum Alloy Double Boilers have two new features. The inside containers are constructed of Alclad Aluminum, which consists of sheets of high purity aluminum permanently bonded to a core of high tensile strength aluminum alloy, and the round inside containers will stand alone. The construction feature eliminates pitting through while providing a strong, dent resistant utensil. They also have open sanitary beads and seamless construction.

Heat spreads fast and evenly in the aluminum boilers and because of the conduction properties of aluminum, the double boilers may be used as cold servers by putting ice into the bottom containers. The new utensils have loop handles, cool Bakelite knobs on the covers, strong construction and are avail-



able in 8, 12 and 20 quart sizes, inside container capacity. The Aluminum Cooking Utensil Co., Dept. NS, New Kensington, Pa. (Key No. 507)

Rust Inhibitive Coating

A new rust inhibitive primer and finish coat is being introduced which normally dries within ten to fifteen minutes. It has many of the rust inhibitive features of Totrust plus the quick drying feature and weather resistance. The new coating has excellent adhesion, even over smooth aluminum and galvanized surfaces, and is designed for either interior or exterior finish. The Wilbur & Williams Co., Dept. NS, 130 Lincoln St., Brighton 35, Mass. (Key No. 508)

(Continued on page 166)

Water Treatment Process

The new Sola Catalytic Process for the treatment of water does not change the chemical structure of water in any way, but by the use of a catalyst in hermetically sealed cells, it stops the formation of new scale and gradually removes all old existing scale. It also reduces corrosion to a minimum. Other benefits of the process include elimination of odors by chlorination, and the elimination of the need for dosing, periodical analysis and control. The process is designed for use in boilers, air conditioning and cooling systems, gas and diesel engines and all types of water systems. It is available in various models for any type of application. Sola Cataly-tic Co., Dept. NS, 520 Browder St., Dallas 1, Texas. (Key No. 509)

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The new Hobart Model F-T26 fully automatic conveyor dishwasher answers every dishwashing service need in one fast machine. Dish handling and supervision of the machine are reduced to a minimum since it is completely automatic in operation. Dishes are continuously racked between resiliently-designed flight-links. These especially treated stainless steel links are tipped with nylon and provide a cushion for rapid loading of china. Flatware and trays are racked in an inclined position and cups may be washed directly on the conveyor.

The conveyor carries the dishes through the jet-powered recirculated water for scrapping, power-washing and power-rinsing, on into the final rinse



and onto the drying and unloading extension. The Hobart Mfg. Co., Dept. NS, Troy, Ohio. (Key No. 510)



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Ample leg room at both ends and sides of table. All steel chassis riveted (not screwed) to a complete 34" Plywood top (not just a frame) for extra ruggedness, with 1/16" Formica, ½" Masonite Tempered Presdwood or ½" Linoleum glued to Plywood, giving a smooth, hard, durable surface with no rivets showing. Metal molding around edge. Table folds compactly and each leg is braced securely.

> Standard sizes 30" x 72" and 30" x 96". Standard heights 30" and 29"—lower for young children. Note—also comes with Plywood Tops only. If It Folds-Ask Howe

HOWE FOLDING FURNITURE, Inc. PARK AVENUE NEW YORK, N. Y



YOUR SCHOOL CAN AFFORD THIS QUALITY PORTABLE SYSTEM

SEND FOR FREE 212-PAGE CATALOG

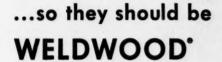


Write today for the only complete Buying Guide overything in Sound, Rodio and Tolevision for the school. Count on ALLED for expert electronic supply service and for lewest, money-serving prices. Send today for your FREE copy of the complete 1952 ALIED Catology.

ALLIED RADIO

833 W. Jackson Blvd. . Dept. 10-8-2 Chicago 7, Illinois

No recess for doors!





School doors must stay on the job! Able to take all kinds of abuse. Ready for any kind of danger.

That's why it is so important for your school to have Weldwood Flush Doors.

Weldwood doors are durable. They won't get a pension for long, faithful service...but they'll deserve one.

Weldwood doors have a fine appearance. Their beautiful hardwood faces help give the entire school a mark of dignity.

Weldwood doors have perfect balance. They stay free from warpage all year 'round. Won't stick or jam.

And when you choose the Weldwood Fire Door or the Weldwood Stay-Strate Door you are sure of fire- and heat-resistance. In fact, the Weldwood Fire Door is approved by the Underwriters'.

So don't take chances. Specify WELDWOOD every time...for Weldwood doors never need a recess!

THE WELDWOOD FIRE DOOR carries Underwriters' Label for all Class B and C openings. Has incombustible Kaylo* core with special construction and fireproofed edge banding. Standard flush faces are handsome birch veneers. Wide variety of other fine hardwood faces available on special order. Safe. Beautiful. Maximum durability. Dimensionally stable.

THE WELDWOOD STAY-STRATE DOOR is similar to the Weldwood Fire Door, but the edge banding is not fireproofed. Recommended for use where a labeled door is not specified, but where fire resistance is a desirable advantage. Same wide variety of beautiful hardwood faces.

*Reg. Trademark, Owens-Illinois Glass Co.

United States Plywood Corporation carries the most complete line of flush doors on the market including the famous Weldwood Fire Doors, Weldwood Stay-Strate Doors, Weldwood Honeycomb Doors, Mengel and Algoma Lumber Core Doors, 136" and 134" with a variety of both foreign d domestic face veneers.

WELDWOOD FLUSH DOORS

Manufactured and distributed by UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 18, N. Y. Branches in Principal Cities • Distributing Units in Chief Trading Areas **Dealers Everywhere**

What's New

The new television microscope for use in science education was developed to allow large groups of persons, such as science classes, to view simultaneously a magnified image of a specimen, rather than limiting observation to one person at a time. The group viewing is made possible by using a small television camera for looking through the microscope. The image seen by the camera eye is carried over a closed circuit to a receiving unit, where it is reproduced on a large viewing screen.

The unit has been designed for use

in schools, colleges and laboratories and was developed in the David Sarnoff Research Center. RCA Victor Div., Radio Corporation of America, Dept. NS, Camden, N. J. (Key No. 511)

Fire Extinguisher

A one quart fire extinguisher has been announced which will remain free from corrosion. A patented corrosion arrestor is part of the pump which purifies the liquid in the General Quick Aire Fire Guards. The one quart vapo-liquid fire guard is approved by the Underwriters' Laboratories, according to the manufacturer, and has been established for dependability and ease of operation. The

E. Jefferson Ave., Detroit 7, Mich. (Key No. 512)

1952 Pioneer Coach



Several new features are provided in the 1952 model Pioneer Coach. In addition, the new bus has tougher paneling, stronger frame and closer integration of all assemblies for extra durability and protection. The new features include a splash-guard at the entrance which keeps water and ice off the steps; new easyoperating controls which close doors

(Continued on page 170)

General Detroit Corp., Dept. NS, 2272 tightly against rubber seals that protect hands and eliminate dust, water and drafts; a new hand-rail so located that even the small child can reach it in getting on or off the bus; a sturdier, better mounting of passenger seats which are securely fastened to a massive guard rail, and new passenger seats with heavily padded backs and soft cushions.

The new model is specifically engineered for utmost passenger protection. The new driver's seat adjusts instantly to individual requirements and an extra large windshield increases the driver's visibility. Rounded contours and smoothflowing lines make the new bus attractive in appearance and the Unibilt body has a strong steel skeleton for safety in case of heavy impact or roll-over. A wider, more massive impact rail runs full length of sides of coach and continues around the rear for added strength and protection as well as balanced styling. More headroom is provided with the new 72 inch height. Veld-green and russet seat color combinations harmonize with the mist-green interior. The coach is dust proofed, sound-conditioned and completely insulated. A new heating and ventilating system distributes warmth and fresh air evenly to all parts of the coach. Superior Coach Corp., Dept. NS, Lima, Ohio. (Key No. 513)

Meets school lunch requirements across the nation!

KEWANEE PRE-WASH!

These factors count most in the school lunch: LOW COST . . . LARGE CAPACITY . . . SPACE-SAVING DESIGN . . . ABILITY TO MET HEALTH DEPARTMENT REQUIREMENTS. That's why the Kewance Pre-Wash is preferred in schools throughout the country (representative names on request).

A big stride ahead of ordinary 3-rub units because it pre-washes with a SPRAY! Prevents carry-over of soil to washing compartment ... then washes and riane-sanitizes up to 3,000 dishes per hour. Also handles glasses, silver, pots and pans. Requires only 11 sq. ft. floor space. HEATS ITS OWN WATER—requires to booster.

THE LOW PRICES ARE A REVELATION . . . WHITE FOR FULL DETAILS

KEWANEE INDUSTRIAL WASHER CORP.

SPEEDY FEEDING . SPEEDY CLEANING

with .

rickson FOLD-A-WAY TABLE WITH BENCHES



Folded for Storage
Easily opened or
closed by one man.
Chassis equipped
with rubber-tired,
ball-bearing casters
for easy handling.
Tables nest readily
in the minimum in the minimum space. Write to-day for complete information.

Strong, Practical, Beautiful!

Strong, Protected, beduring steel tubing gives maximum strength. Table top faced with beautiful tan linen plastic bonded to heavy plywood . . . aluminum trim.

Greater capacity, perfect light reflection, less noise and confusion.

Portables in 12-ft. and 14-ft. lengths. Wall attached model in 8-ft. lengths.



HALDEMAN-LANGFORD MFG. CO. 2580 University Ave. St. Paul 4, Minn



F-100*-another helpful Wyandotte Chemicals product at work

Make dull floors <u>bright</u>, <u>sparkling</u>—cut cleaner costs up to \$16900 PER DRUM

A^{DD} YOUR own water to highquality, all-soluble Wyandotte F-100 in powder form. Enjoy safer, better cleaning of painted surfaces and floors. Sensational savings, too!

Easy does it with Wyandotte F-100. This superior cleaner is easy to buy, handle, store, and use. F-100 dissolves completely, too, in water. It is gentle to hands, and harmless to all types of floors, woodwork, walls and other painted surfaces.

It leaves no film or deposit.

Two ounces make one gallon

That's right! Two ounces of Wyandotte F-100 make one gallon of cleaning solution. All you do is add water. Using the recommended concentration of F-100, you save up to \$169 per drum over other cleaners (based on actual market cost of concentrated cleaners in 55-gallon drums).

Compare this with what you are paying for cleaners of comparable quality. Then, let a helpful Wyandotte representative give you a demonstration. Ask your jobber or call the nearest Wyandotte Office. Wyandotte Chemicals Corporation, Wyandotte, Michigan; also Los Angeles, California.

*REG. U.S. PAT. OFF.



Helpful service representatives in 88 cities in the United States and Canada

Largest manufacturers of specialized cleaning products for business and industry

Vol. 49, No. 3, March 1952

CLEANING

WORLD

167

MUMINIM ART REQUIREMENTS

for 1st, 2nd, 3rd Grades

Compiled in cooperation with art educators, designed for a limited budget, and based on a class of 30 students.



CRAYOLA-Large size erayons, 8 col-ors. I box No. 33 per pupil.



ARTISTA POWDER PAINT

i pound each Red, Yellow, Blue, Green, Black, Brown -2 pounds White per class.



2 pints each Red. Green, Blue, 1 pint each Yellow, Brown, Black per class.

CLAYOLA MODELING CLAY— 10 pounds per class. Available in ¼ to 5 lb. bars, in 9 mellow colors.



Other Art Materials

Firma-Grip Paste. 2 quarts No. 321F per class **Building Blocks**, Artisto Brushes. Scissors.
Paper—Plain—

1 large set per class Large No. 11, 1 dozen per class Small, 1 dozen per class 2 Reams Cream Manila, 12 x 18 2 Reams News Print, 18 x 24

Colored— 200 Sheets Asst., 12 x 18 Finger-Paint Paper—200 Sheets, 16 x 22

Art and Craft Catalog and complete Suggested Min-imum List sent on request, Address Dept. NS52.



41 E. 42nd St., New York 17, N. Y.



This ingenious 3-position safety switch enables you to turn off the Instructor projection lamp you to turn on the instructor projection tamp at the conclusion of your presentation—but keeps the blower fan turned on tor fast heat dissi-pation. This simple procedure lengthens the lamp's service life, perceptibly reducing the cost of lamp maintenance. This safety switch is standard equipment on the three blower cooled models in the popular Instructor series of four tri-purpose projectors.

only the Instructor by SVE offers so many exclusive features!



- 3-Position Safety Switch
- Re-Wind Takeup
- Revolving Projector-Head Lock
- Positive Worm Gear Tilt Double-Frame Film Advance

All Instructors feature only one grade of bigbest quality, precision ground, pol-ished and coated optics.

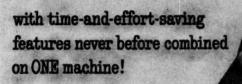
Ask your Audio-Visual Dealer for a demonstration of the INSTRUCTOR. It's the projector which is approved in classrooms all over the world! From \$89.50 to \$219.50.

Dept. AJ-7

SOCIETY FOR VISUAL EDUCATION, INC.

1345 Diversey Parkway . Chicago 14: Illinois

The National Adding Machine



CHECK THESE OUTSTANDING FEATURES ...

Automatic clear signal. Gives automatic printed proof of whether or not the machine was clear when the operator started

Automatic space-up of tape. Spaces tape to correct tearoff position when total is printed. Saves time, effort, paper.

Automatic credit balance. Actual minus totals are automatically computed, and printed by a single touch of the total bar. Prints in red, with CR symbol.

Full, visible keyboard. All ciphers print automatically—saving time, motion, and effort! Two or more keys can be depressed simultaneously. Amounts remain visible until added.

These National Adding Machine features can mean money to you...in time saved...in added accuracy...in more work done with less effort. Prove it in your own work.

Easy-touch key action.
Depression of keys is practically effortless, yet sufficient to tell you when you have depressed a key. Tension is uniform 3½ az.

Call the local National Cash Register Company's office, or the dealer or distributor for National Adding Machines. Arrange for a revealing demonstration now.

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO

Subtractions in red, can never be mistaken for additions. Stand out prominently even after amounts have been "cheeked off" on the tape. Identified in stantly, for everyone knows the meaning of red figures.

机加加加加加加加

Large answer diels.

Always show the accumulated total in large numerals. Permit use of machine without tape.

Reavy-duty construction.
Compact for desk use. Portable enough to move about, yet ugged enough to carry on hrough long years of hard ervice.



What's New

A new rubber base product which, in one coat, gives interior walls and ceilings a soft matte finish, is being introduced as Paratex Wall Coating. It is or dead spots" from the lime in plaster or because of variations in porosity of surfaces, and covers and hides in one coat. No sizing is required on unpainted walls and ceilings since the product is its own sealer. The product can be applied with brush, roller or spray and no special liquid is required for cleaning brushes, rollers or spray lines. Paratex Wall Coating is prepared ready for use and does not have a strong, offensive odor. It is available in a modern line of new colors adapted to present day decorative trends. Truscon Laboratories, Dept. NS, 1700 Caniff Ave., Detroit 11, Mich. (Key No. 514)

Photocopy Machine

A new machine has been developed to produce dry photocopies almost instantly. The Auto-Stat is based on a new principle of instant and automatic developing and fixing. No training or special skill is required to produce clear black and white copies of any original. The new method is fast and simple,

and occupies no more space than a typewriter. It is extremely flexible with no limitations as to type of papers, documents or originals that can be copied,



regardless of whether the original is printed on one or both sides or on opaque or translucent paper. The unit is designed to handle letter and legal size copies as well as larger copies up to 11 by 17 inches. The machine is smartly styled and has a gray hammer-loid and black wrinkle finish. It is American Photocopy Equipment Co., (Key No. 516)

(Continued on page 174)

a finished copy being produced in less Dept. NS, 2849 N. Clark St., Chicago than thirty seconds. The unit is compact 14. (Key No. 515)

Germicidal Cleaner

A new liquid germicidal cleaner has been introduced that thoroughly cleanses while deodorizing and disinfecting the areas treated. It should be of particular interest for maintenance in the school and the three-way action eliminates the need for more than one product to do the complete maintenance job.

Known as Korex Germicidal Cleaner, the product is a unique compound com-bining soap, a synthetic detergent, a germicide, a wetting agent and penetrant with water softeners and emulsifiers. It is unaffected by water hardness, cuts through dirt, breaks it down and floats it away in one application. With a phenol coefficient of 2, its germicidal properties are effective against many bacteria. It is highly concentrated and diluted up to 40 to 1 with water before using. It has been proved effective, through extensive testing, on all types of floors and on furniture, woodwork, walls, hard goods furnishings, leather and metal. It is said to be safe on any surface unharmed by water and not to irritate human skin. Huntington Laborsturdily constructed of stainless steel. atories, Inc., Dept. NS, Huntington, Ind.



REASONS

More Holden Book Covers were used last year than Ever Before:

HOLDEN COVERS actually do increase the life of textbooks up to 3 years!

They receive the wear instead of the books.

They protect textbooks from damage both in the classroom and while carried back and forth to school-in all kinds of weather.

They create a Saving; thereby releasing funds for other needed supplies.

They keep new books from quickly growing old.

Students and parents alike appreciate having textbooks clean, sanitary and workmanlike.

School officials realize that clean books are as essential as good drinking water and pure air.

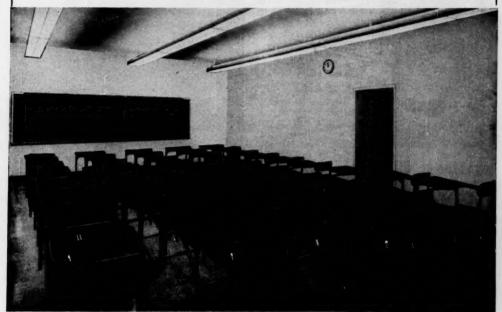
GET THE HOLDEN HABIT •

Samples free

HOLDEN PATENT BOOK COVER COMPANY, SPRINGFIELD, MASSACHUSETTS

Efficient Furniture Complements Classroom Design in NORTH HUNTINGTON HIGH SCHOOL

From ceiling lights to floor coverings, every element of this new Irwin, Pa. school has been designed and selected to make both learning and teaching more resultful. Quite logically, sturdy, lightweight Heywood-Wakefield tubular steel furniture was selected for this entire school. Sorber & Hoone, Greensburg, Pa. were the Architects, and the installation of Heywood-Wakefield furniture was arranged by Hughes-Ogilvie Company, Pittsburgh, Pa., distributor for Heywood-Wakefield Company, One Park Avenue, New York.



(Photo courtesy of Pittsburgh Reflector Company)

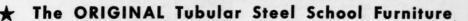


The highly functional classrooms such as this throughout the school are seated with a total of 480 study-top chair units \$501 STBR, which have a convenient book rack and ample working surface. Other Heywood-Wakefeld furniture in the school includes 67 Model \$987 Tables with plastic tops and 240 \$915 Chairs in the cafteria, and 736 Model TC 704 Auditorium Seatz.

If you have not already received the current catalogue of Heywood-Wakefield tubular steel furniture, write to: Heywood-Wakefield Company, School Furniture Division, Menominee, Michigan.



School Furniture Division
Gardner, Mass, and Menominee, Mich.





The Three Musketeers of Cockdom





No. 68-264 (Masterkeyed) NATIONAL LOCK combination self-locking Shackle Lock

A product of National Lock's 48 years of lock manufacturing experience. Forty number dial develops thousands of different settings. All parts are machined Brass of Steel. Masterkeyed for opening by authorized custodian.

NATIONAL LOCK Free Record Charts... Handy Leatherette

Binder Shipped with initial order of 100 or more NATIONAL LOCK combination locks is a beautiful leatherette binder containing carefully-conceived charts, that will prove of real assistance in maintaining orderly control of lockers.

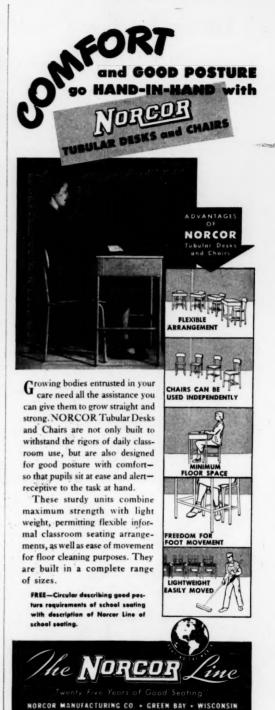


07 07

No. 68-265 (Not Masterkeyed) NATIONAL LOCK combination self-locking Shackle Lock

This ideal school locker lock has extra-heavy shackle and sturdy construction throughout. Shackle, box, plug, cylinder and knob are all Chromium Plated. Black baked enamel dial with white gradations assures easy visibility. Same as shackle lock No. 68-264, except without masterkey feature.

NATIONAL LOCK COMPANY Rockford, Illinois • Lock Division





Because VU-LYTE is replete with tested innovations to make METAL BELT CONVEYOR. As new copy is fed in at the left side of lecturing and viewing easier, it is the unrivalled leader for the projector, preceding copy is ejected from the right side. both lecturing and viewing easier, it is the unrivalled leader for opaque projection in schools, churches, clubs, and business.

1. YOU CAN use the VU-LYTE in a partially lighted room. Total darkness is not necessary in order to obtain clear, sharp images and brilliant colors—because VU-LYTE provides extra illumination.

YOU CAN feed mixed or continuous copy through smoothly, without light flashes, by means of the Beseler FEED-O-MATIC*

3. YOU CAN use copy "as is elected from the right side.

3. YOU CAN use copy "as is"—without mounting or inserting into any special holding device. The unique Beseler YACUMATIC" PLATEN holds all copy absolutely flat during projection. A full 8½ x 11 page letter or a postage stamp can be projected with equal ease, without curl or flutter.

4. YOU CAN use YU-LYTE on an uneven surface—project on small or large screens. In addition, YU-LYTE is an amazingly quiet and cool-operating opaque projector.



These advanced, exclusive features, plus others, are incorporated in a projector that weighs only 35 lbs. and is REDUCED IN PRICE. Ask for free demonstration of the precision-built VU-LYTE in your own projection room. And for more information regarding

this truly new concept in opaque projection, ask for booklet N

CHARLES BESELER COMPANY

What's New ...

Rite Green Chalkboard

Exhaustive laboratory tests for readability, reflectivity, ease of writing, ease of erasing and durability were made on the new Rite Green Chalkboard by Tylac before it was released recently. The Tylac finish is a combination of hard, double coated synthetic resin and silicate, highly abrasive resistant, on a ½ inch smooth, grainless, long fiber, all-wood tempered base, waterproofed to resist moisture permanently and treated so that it does not warp, bulge, split, splinter, crack or peel. The hard finish makes the board dentproof so that chalk pressure does not mar it. Color retention is high so that no color change takes place from the use of strong soaps in cleaning.

from the use of strong soaps in cleaning. Rite Green Chalkboard by Tylac is built to become an integral, permanent part of the school and college building. It is easily installed with Tylac M-100 cement over a plaster wall base, in any length, by butting the matched joints. Rite Green Chalkboard comes in only one color, a light green which has been tested and found to be the most nearly correct color for eliminating eye strain. The new board is manufactured in three heights: 3 feet, 31/2 feet and 4 feet. It comes in four lengths: 4, 5, 6, and 8 feet. It is economical in price and built for long service. Tylac Company, Dept. NS, Monticello, Ill. (Key No. 517)

Portable Tape Recorder

The Magnemite is a battery-operated portable tape recorder-playback unit embodying features recommended and approved in a survey among schools and other agencies. It weighs only 9%



pounds and measures 11½ by 8½ by 5½ inches in size. It is the result of three years of development and provides extreme clarity of speech. The high gain amplifier requires no preliminary warm-up and will pick up a normal speaking voice 100 feet from the microphone.

The special noiseless and vibrationless spring wound motor will run 15 min(Continued on page 178)

utes on a single winding and may be rewound during operation. The Magnemite operates from self-contained dry batteries that last 100 hours without replacement. Two hours of recording time can be accommodated on a single 5 inch reel of standard ½ inch wide sound recording tape which can be reused indefinitely. Playback is accomplished through crystal earphones. An external power amplifier and speaker may also be connected to the output terminal. It is contained in an attractive two-tone leatherette covered case and can be operated anywhere and in any position, as well as in motion. Amplifier Corp. of America, Dept. NS, 398 Broadway, New York 13. (Key No. 518)

Super-Resistant Floors

AWOG floors are scientifically developed to resist such common floor disintegrators as acid, water, oil and grease. The close-knit composition of the product gives it extreme durability and does not permit liquids to penetrate the bonding element. AWOG can be used for repairing broken areas or for complete overlays in floors getting hard usage. It is sanitary and can be used over brick, stone or wood, indoors or out. Flexrock Company, Dept. NS, 3620 Filbert St., Philadelphia 4, Pa. (Key No. 519)

THE NATIONAL LINE OF MODULAR SCHOOL FURNITURE

What Qualities Do You Look For In A School Chair ?

. MATERIALS THAT WILL WITHSTAND HARDEST USE

In all parts subject to greatest stress—back posts, back rest and seat frame—the National School Chair uses electronically laminated wood. This is the same type of material which for its superior strength, lightness, and resilience is used in the construction of glider planes of the U.S. Air Force.

. DESIGN THAT PRODUCES CORRECT, HEALTHY POSTURE

The posture features of the National School Chair—the body-conforming shape of the back rest, the design of the seat, and the radius of the back posts—have been especially designed to assure correct, healthy posture in students of every school age. It is produced in one-inch gradations for all sizes from kindergarten through college.

GUARANTEE OF LONG LIFE — HIGHEST RETURN ON INVESTMENT

The National School Chair is the only chair guaranteed for five years against any defect in materials and workmanship and any breakage, unless caused by willful destruction.

> For information on the principle of modular coordination for the modern classroom and on the National Line of Modular School Furniture, write for our free catalog.



NATIONAL SCHOOL FURNITURE COMPANY • Division of National Store Fixture Co., Inc. • BALTIMORE-23, MARYLAND

maintenance is easier



with the all- Hexalum, venetian blind cuts cleaning time...cuts maintenance costs

> At last! A venetian blind specifically designed to ease all your window maintenance problems . . . the all-Flexalum blind!

- cleans faster, more easily tapes and cords are non-porous vinyl plastic, wipe clean with a damp cloth
 - · slats are sleek aluminum with mar-proof finish . . . shed dust, easier to clean

- requires fewer replacements sturdy plastic tapes last for years: won't fade, shrink, stretch, fray
 - · cords retain tensile strength, wear longer without fraying or breaking
 - · slats are spring-tempered for greater resilience, won't bend out of shape
 - tassels are soft-molded plastic . . . noiseless and unbreakable

- needs fewer repairs friction-free, precision mechanism is sealed in steel, lubricated for life
 - · baked enamel finish on slats won't chip, crack, peel, rust
 - · sturdy top bar, rigid bottom bar also mar-proof finished

One and only one reputable manufacturer is responsible for every part of your all-Flexalum blind: your assurance that every blind you buy . . no matter where, no matter when ... will be of the same superior quality.



Write for free 8-page catalogue containing complete details on the all-Flexalum blind.

HUNTER DOUGLAS CORPORATION, Riverside, California or 150 Broadway, New York 58 . In Canada: Hunter Douglas Ltd., Montreal, Que.



Build Distinctive, Economical Classrooms

with readily available Glulam Timbers

Here's a classroom designed to give the youngster a pleasant start in his school career. It's designed to save construction costs, too. For the glulam beams not only furnish the friendly, informal atmosphere, but they also are primary structural members which support the roof without interior posts or supports of any kind.

There are no better structural members for classroom construction than glulam timbers. Initial costs are moderate. Maintenance is negligible. Formed of thoroughly seasoned material, they are dimensionally stable and free from seasoning action. They are highly resistant to destruction by fire, giving ample margins of safety in case of emergency evacuation.

Glulam beams are available in large or small quantities, and delivery can be made on short notice.

To learn more about these modern timbers and their application in school construction, ask us for the booklet, "Modern Functional Schools". Use the coupon.

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Independent laboratory tests prove-

YOUR PENCIL SHARPENER DOLLARS BUY MORE WHEN YOU SPECIFY



Tests by leading independent laboratories* prove that model for model, Apsco sharpens

more than 2½ times as many points as other brands. You save up to 70% of your cutter replacement costs. And Apsco gives you more points per pencil.



COMPARE THE POINTS!

Unretouched laboratory photographs** show the sharpening superiority of Apsco's exclusive undercut cutter design. Compare Apsco's 28,000th point with 9,000th point of comparable competitive sharpener. See why it costs less... to buy the best!

NEW DEXTER NO. 3!

The perfect sharpener for school use. Smart new styling. All-steel construction for years of trouble-free service. Steel frame supportsr cutter head at both ends. Extralong steel cutters. Point adjuster. Pencil stop. Centering turret for all sizes of wood case pencils.



FREE! "PROPER CARE OF PENCIL SHARPENERS"!

How to install sharpeners, adjust pencil stop, replace cutters!
These and many other questions are answered in new Apsco service bulletins now available to schools free of charge. See your Apsco dealer or mail coupon for service bulletins.

	Automatic Pencil Sharpener Co., DeptI 336 N. Foothill Road, Beverly Hills, Calif. Please send me new literature on proper installat and care of Apsco pencil sharpeners:			
Apsed	Our school has sharpeners.	(name of models) Apsco		
Contract of the second	Nome	Title		
	School			
3-1	Address	Zone		
LAU	City	State		

IT COSTS LESS TO BUY THE BEST!

*United States Testing Co., Test Nos. 89388 and E-756
*Pittsburgh Testing Laboratory, File No. 32999.1

Can your school buildings pass this entrance exam?



Any acceptable school building must answer "Yes" to these two questions: Does it offer all the facilities you require? Is the cost within your budget?

With a STEELOX School Building you can provide educational facilities and equipment the same as in any building. Yet, because of unique STEELOX construction, your school building will cost far less than any other building.

One reason is the patented STEELOX panel that provides both structural support and finished surface in a single unit. This permits fast erection. For example, the main structure of one 8-room STEELOX school was erected in just three weeks.

Low erected cost is not an empty promise. To illustrate, a 6-classroom STEELOX School Building was built at a total cost of only \$7,097.37 per room — including all interior finishing and equipment. The work was done by a local contractor.

Maintenance is no problem. An occasional painting is about all that is necessary. There is nothing to crack, warp or rot. Write us if you or your architect would like information on your specific school building problem. Armco Drainage & Metal Products, Inc., 1802 Curtis Street, Middletown, Ohio. Subsidiary of Armco Steel Corporation.



Easy fitting, weathertight STERIOX Joint.



Patented STEELOX panels are strong, resist fire.

Armco Steel Buildings



What's New

Folding Machines

The new Model 56 Folding Machine recently introduced was designed to stress ease of use. A "Quick Set Fold Chart" reduces the most commonly used folds to simple alphabetical settings and includes single folds, parallel letter folds, double parallel folds, accordion or statement folds. French folds and horizontal with two vertical folds.

The new machine is low in cost and folds paper stock in weights from 16 to 36 substance in sizes ranging from $2\frac{1}{2}$ to 9 inches in width and $3\frac{1}{2}$ to 14 inches in length. Upper and lower fold plates bear precision scales clearly marked in inches to permit accurate plate settings for other types of folds not included in the chart. A. B. Dick Co., Dept. NS, 5700 W. Touhy Ave., Chicago 31. (Key No. 520)

Napkin Disposal Service

Sanibag Service was developed to provide a quick, practical method for disposing of sanitary napkins. The service consists of Sanibags, which are paper bags especially designed for sanitary napkin disposal, and a compact white plastic wall dispenser which holds a quantity of Sanibags. The dispenser can be quickly installed in each lavatory yards of snow in an hour. It is highly

service should reduce toilet stoppages that often occur in women's lavatories while providing a personal service which



will be appreciated by those responsible for toilet room maintenance as well as by women students. Beier and Company, Dept. NS, 409 S. Green St., Chicago 7. (Key No. 521)

Snow Remover

The new Toro Snow Boy is a rotary plow with snow blower designed to clear a 33 inch path through soft or packeddown snow and to remove 500 cubic

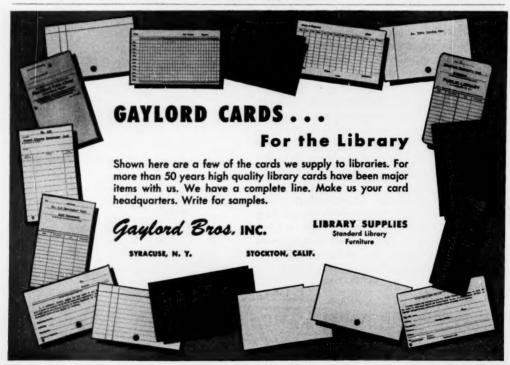
(Continued on page 182)

with a large supply of Sanibags. The maneuverable and designed for use on streets, sidewalks, parking lots, skating rinks, playing fields and other areas where snow must be removed.

The Snow Boy has two rotating elements, the milling blades that displace the snow and the ejecting turbine that tosses it aside. It will throw snow 65 feet in any direction desired, thus eliminating high snow banks on each side of a walk or drive. The plow was originally developed, tested and perfected in Switzerland and has been further refined by Toro engineers. It has six forward and two reverse speeds, ranging from one-third to two and three-quarter miles per hour. The wheels have independent clutches for easy turning in small places and the rotary blades have four speeds. Toro Mfg. Corp., Dept. NS, 3042 Snelling Ave., Minneapolis 6, Minn. (Key No. 522)

Waterless Potato Peeler

The new Dickar Electric Waterless Potato Peeler is designed for use as a table model. No water is needed in peeling and waste is emptied into a pail or can so that plumbing is not needed. The unit is ruggedly constructed of heavy cast aluminum and is simple in operation. Service Appliance Co., Dept. NS, 1775 Broadway, New York 19. (Key No. 523)



A compelling reason for preferring



It begins with Royal Standard which surveys show is preferred 2½ to 1 by girls who type...over any other make.

The same quality and time-saving features that are in the Royal Standard are built into the Royal Electric ... plus electric power.

With Royal Electric there is less operator fatigue. The operator herself turns out more work per day and turns out better work. "Relaxed" typing is encouraged. Is it any wonder that the business world is turning more and more to Royal Electric Typewriters?

Be sure your students are prepared to meet this trend in the business world by giving them instruction on Royal Electric. Remember, it is the business world's favorite Royal Standard with power added.



Made by the world's largest manufacturer of typewriters

	, N. Y. to see a demonstration of the Royal
Flooring with and allies in	An exa
	to me.
Electric, without obligation NAME	to me.



MORE seating capacity
MORE leg comfort
MORE exclusive features
MORE strength and rigidity
MORE for your money

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Consult Brulin on your floor maintenance problems. Brulin floor cleaners, seals and finishes provide new beauty, greater economy, greater safety—and there are more than one hundred trained representatives to serve. These men are ready to supervise original installation. Ask for a free Demonstration to study. Brulin manufactured floor cleaners, seals and finishes are Underwriters Laboratorias approved.

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heckerette PORTABLE STEEL COAT RACKS



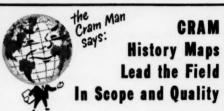
Set up in a few minutes nywhere, without bolts, nuts r tools, these light, strong gid racks provide a 4 ft. ar for coat hangers and 2

vantilated hat shelves.
Answers the "wraps problem" for classrooms, school cafeterias, PTA meetings, etc. Ideal for shop coats, for drying athletic gear or storing academic robes, band uniforms, etc. (with shelf assembled in top position, bar will take longest garment

Sturdy, rigid in use, these racks will shand up for years as permanent installations or can be quickly disassembled and stored in small space and stored in small space are regency use. They are strongly built of heavy gauge steel, electrically welded, (when specified—16 double hooks will be provided that shap over hanger bar to accommodate 32 coats or laborators arons).

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SIMPLIFIES ADMINISTRATION

Have efficient control and coordination of all activities. Cut the volume of carried messages—make announcements (to selected rooms or to entire school) without routine-disturbing assemblies—take attendance records speedily—have safe, sure centralized supervision of fire drills and emergencies. Have at your fingertips instant two-way intercommunication between any classroom and central office for effective administration.

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Provides dramatically effective teaching materials. Radio broadcasts, records and school-produced "live" broadcasts can be channeled to selected rooms, to vitalize instruction in history, current events, geography, languages, music appreciation, speech, and drama. Record music provides rhythm for physical education, cafeteria entertainment, background music for disciplined assemblies and dismissals—these and a host of other valuable functions contributing to the enhancement of the school program.

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I. Every desirable program service: Radio, Phonograph, Microphone and Intercommunication. 2. Distribution of programs to any selected room or to all rooms. 3. Three-program facilities available simultaneously to different groups of rooms. 4. High Fidelity AM and FM Radio (one or two as desired). 5. Three-Speed Transcription Type Phonograph. 6. Facilities for broadcasting any clastroom activity over the entire system. 7. Adequate microphone circuits (six). 8. Speech origination from clastrooms. 9. Sectet system with complete privacy. 10. With monitoring tone signal. 11. Automatic Master Emergency Call button apprenting regardless of any control or switch setting. 12. Automatic Program Schedule Clock. 13. Compartments for storing records and accessories. 14. Compartment with sliding shelf for record changer or recorder. 15. Underwriters' Approved.

Let us show you, without obligation, how the RAULAND SC160 System incorporating all of these features, can enhance the administrative and educational program of your school. Write us-4oday for full details.

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3523-N ADDISON ST., CHICAGO 18, ILLINOIS

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End cloakroom headaches with (STANLEY) School Wardrobe Hardware



Classroom wardrobes equipped with Stanley Wardrobe Hardware eliminate the delay and confusion of old-fashioned cloakrooms. Doors glide into wardrobe and do not hinder passage when open... provide easy access to shelves and hangers. Clearance between doors and floor for ventilation.

Two classrooms from one... with [STANLEY] Accordion Door Hardware



Typical Installation

With Stanley Accordion Door Hardware you can quickly and easily divide a large classroom into two smaller rooms. Ruggedly designed sets of Stanley Hardware, complete with sturdy tracks and brackets, rubber bumpers and flush pulls permit accordion doors to operate smoothly and easily.

Ask your supplier for more information about Stanley Hardware especially designed for school use, or write The Stanley Works, New Britain, Conn.



HARDWARE . TOOLS . ELECTRIC TOOLS . STEEL STRAPPING . STEEL

What's New ...

Product Literature

- How punched-card users can speed-up and simplify the preparation of records and reports is discussed in a new 18 page illustrated folder issued by Remington Rand Inc., 315 Fourth Ave., New York 10. Detailed information is given on the Remington Rand Interfiling Reproducing Punch and the time and money saving which can be effected by its use. (Key No. 524)
- · A new 28 page illustrated catalog has been released with full detailed information on the Mitchell line of commercial fluorescent lighting units. Catalog No. 433 issued by Mitchell Mfg. Co., 2525 N. Clybourn Ave., Chicago 14, covers all commercial lighting needs with a wide choice of proper lighting for schools, colleges, hospitals and other institutions. Featured are high efficiency Slimline models; open-type, glass shielded and louver shielded Toffers; strip lighting units; streamlined shielded luminaires; pace setting spotlights, and many others. Also included in the catalog is complete information on accessory equipment for the luminaires. (Key No. 525)
- "How You Can Reduce Your Maintenance Painting Cost" is the title of a booklet issued by Enterprise Paint Mfg. Co., 2841 S. Ashland Ave., Chicago 8.

The booklet tells the story of Staize-Clene, the paint made with Syncon which prevents dirt and grime from penetrating into the pores of the paint film. Information on maintenance problems and on the use of Staize-Clene in schools, hospitals, offices and other insituations is included. (Key No. 526)

- The Durkee "Family of Food Products" for the institutional trade is discussed in a new four color folder recently released by the Institution Division of Durkee Famous Foods, 94th and Corona Ave., Elmhurst, Long Island, N. Y. The folder gives information on Durkee products used primarily by institutions and includes Durkee's Grade AA Margarine, Puff Pastry and Bakers' Margerine, "Stayfresh" Coconut, Vegetable Oils, Durkee's Famous Dressing, Worcester Sauce, Spice and Extracts, Shortening and Salad Products. (Key No. 527)
- Detailed application data and outstanding uses of Laykold Fibrecoat, a weatherproof mineral-armored asphalt, are given in a new 4 page brochure recently released by American Bitumuls & Asphalt Co., 200 Bush St., San Francisco 4, Calif. The folder outlines the practical utilization of Laykold Fibrecoat for protection of bituminous roofs and metal and includes specifications, appli-

cation data, approximate costs and gives detailed information regarding equipment used in applying the product. (Key No. 528)

- Savings can be effected in fuel consumption and efficiency of the heating system can be increased through the restoration process described in a brochure issued by Chas. J. Riley & Sons, 6352 N. Maplewood Ave., Chicago 45. What causes the drop in heating efficiency of a heating plant and how it can be corrected are discussed in the brochure. A second maintenance problem covered is the water storage tank. How it can give far longer service when protected against rusting and pitting by Rock-Tite Stone linings is brought out in the text. (Key No. 529)
- "The 1951-52 School Catalog of Outstanding 16 MM. Films" contains descriptive information on a long list of background films available from Films Incorporated, 1150 Wilmette Ave., Wilmette, Ill. These Hollywood productions are offered as supplementary instructional material. The catalog lists the films under subject headings and is fully indexed. Other subjects covered in the catalog include: How to Order Films; Sliding Scale of Rental Rates; the Discussionstrip, and Things to Remember in Ordering. (Key No. 530)

(Continued on page 186)



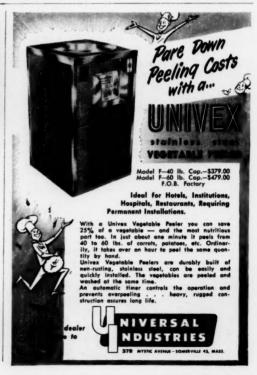
Sun Ray Woolers do an extra fine and highly efficient job of cleaning, dry scrubbing, polishing, and wax-finishing all types of floors! Only Sun Ray Woolers are formed from long, strong strands of steel wool placed radially so they always rotate at right angles to the work . . . assuring fast, clean, efficient operation.

Made in grades 0, 1, 2, 3 & 4 to fit every job, and in all sizes to fit the brush on any single disc-type floor machine.

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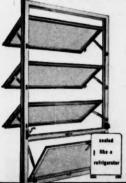
"Teacher made me sit near the windows yesterday.

Poor little tyke...not even a grown-up can safely cope with the dangers of drafty windows. In either case, it is so unnecessary...drafty, poorly weatherstripped windows are as old-fashioned as the dunce cap"!

AUTO-LOK Windows are the modern, sensible answer. With AUTO-LOK Windows you need not sacrifice healthful room-comfort to provide light from a wall of windows. With AUTO-LOK Windows you eliminate the "danger zone" alongside the window wall!

TIGHTEST CLOSING WINDOWS EVER MADE

Let AUTO-LOK cut your heating and air-conditioning costs year after year. When AUTO-LOK Windows are closed, they are literally sealed shut like the door of a refrigerator, reducing air infiltration to a degree heretofore believed impossible. Cuts heating and air-conditioning costs to a minimum!



"NO-DRAFT" VENTILATION... When AUTO-LOK Windows are open...entering air is always scooped inward and upward...Leave the vents open even when it is raining...the rain can't enter, but fresh air will.

NO MAINTENANCE PROBLEMS...Friction-free AUTO-LOK hardware requires no attention or adjustments...ever. For the life of your school, opening or closing of AUTO-LOK Windows is as free and easy as the first opening or closing. They never stick...never rattle. They are easy to clean...all from the inside...top vent, too.

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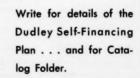
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"Make no little plans"

Providing education for a million more children each year is building for the future. Let's be sure the building, too, is "for the future!"

Whether your present school plans call for enlargement of existing facilities or for new school construction, Crane quality and Crane dependability can help you conserve school dollars through the years.

Crane plumbing fixtures are designed for easy cleaning, easy maintenance. And they're built to "take it." They will meet your growing service load with an absolute minimum of maintenance expense.

So, while you're planning, plan for the years. And, for long-run economy, plan on Crane, "the preferred plumbing."



The Crane Norwich lavatory, with soap dispenser and spray faucet-"preferred plumbing" for many school installations.

CRANE CO. PLUMBING AND HEATING

Vol. 49, No. 3, March 1952

What's New

- · "Let Yourself In For Happy Hours" is the apt title of the new full color booklet of GymSuit fashions for girls recently released by E. R. Moore Co., 932 Dakin St., Chicago 13. Several new styles of gymnasium apparel for colleges, high schools and elementary schools never before presented are shown in the new booklet. It is illustrated in full color and carries small swatches of Sanforized fabrics. The suits are designed to comlooks. (Key No. 531)
- The use of silicone base materials to make masonry walls water repellent is discussed in a new technical bulletin issued by The Monroe Co., Inc., 10703 Quebec Ave., Cleveland 6, Ohio. Bulletin No. 126-11 discusses preventive methods to overcome the damage caused by absorption of water into masonry surfaces and contains a study of the water repellency problem. (Key No. 532)
- The uses, advantages and official Underwriters' Laboratories fire-resistance ratings of Firestop Bestwall are discussed in a new illustrated folder issued by Certain-teed Products Corp., Ardmore, Pa. A cut-away drawing shows where this gypsum wallboard with improved fire-resistive properties should be used in a building. (Key No. 533)

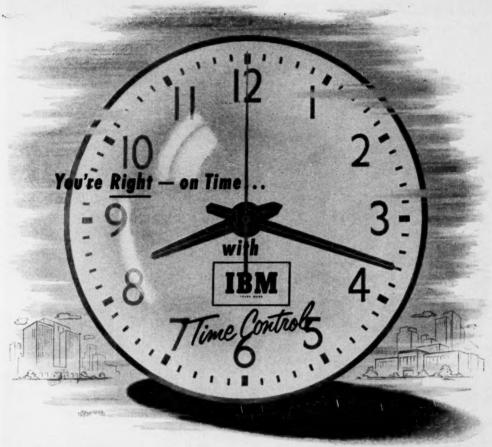
- data on the Spencer Mop Vac Dry Mop Cleaners. Illustrations of the product by itself and in use are supplemented by full descriptive details. The bulletin is available from The Spencer Turbine Co., Hartford 6, Conn. (Key No. 534)
- The new Holophane "Datalog" is a 64 page catalog of pertinent information regarding all Holophane products. It bine freedom of action with smart good contains 90 product illustrations and many cross-sectional drawings and candlepower distribution curves. Special emphasis is given to the description, performance, application and installation as well as the dimensional data of these lighting units designed and engineered for specific purposes. The new Holophane Light and Vision Institute is also described. The "Datalog" is available from the Holophane Company, Inc., 342 Madison Ave., New York 17. (Key No. 535)
 - A complete new Catalog No. LP-31 of "Laboratory Glassware" has been issued by Corning Glass Works, Corning, N. Y. The 190 page book gives detailed descriptive information and prices on the full line of laboratory glassware available from this company and has a special section on Vycor brand laboratory glassware and its properties. (Key No. 536)

- Bulletin No. 138-C gives informative The new 1952 Athletic Equipment Catalog is now available from W. J. Voit Rubber Corp., 1600 East 25th St., Los Angeles 11, Calif. The 32 page booklet lists over 80 Voit items, including some new additions to the line such as the Safety Mouth Protectors, Adjustable Swim-Fins, Deluxe Custom Swim-Mask and other items. (Key No. 537)
 - The qualities and performance of Joanna Vinylized Wall Fabric are discussed in an 8 page illustrated brochure recently released by Joanna Western Mills Co., 22nd & Jefferson Sts., Chi-cago 16. The booklet presents a stepby-step story of the construction, application, wearing qualities and recom-mended uses of this plastic-on-cloth material developed to cut decorating costs for institutions since it is resistant to scuffing, scraping and bruising, stains and smears, and can be washed with plain soap and water or any ordinary cleaning solution. A card of actual samples is included. (Key No. 538)
 - · Fifty years of service to schools is recorded in a booklet issued by the American Education Press, 400 S. Front St., Columbus 15, Ohio. Entitled "Our Half Century of Service to Schools," the booklet tells the story of the found-ing of "Current Events" instruction in America. (Key No. 539)

(Continued on page 190)







Right—because all units are kept in uniform time, to the second, electronically.

Right—because with an IBM Electronic Time System* no special clock and signal wiring is needed. Clocks and signals connect with the regular AC lighting circuit.

Right—because units may be added or relocated later without the inconvenience and expense of special wiring.

Right—because behind the IBM Electronic Time System stands IBM's 50 year record of accuracy and dependability in time control.

IBM time equipment includes Electronic and Electric Time Systems, Program Signaling Systems, Nurses' Call, Fire Alarm, and Intercommunicating Telephone Systems, Recording Door Locks, Tower Clocks, Athletic Scoreboards and Timers. *Electric Time System with Electronic Self-regulation.

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2. COST SECONO



B. COMMICUTIVE

Captain Raymond Harvey Medal of Honor



The 17th Infantry Regiment was attacking Hill 1232 near Taemi-Doug, Korea. Able and Baker Companies became split by a Red-held ridge. Charlie Company, Captain Harvey commanding, was moving up to fill the gap when the dug-in Red guns pinned it down. Calling for covering fire, Captain Harvey advanced



alone through a hail of enemy bullets. One by one, he personally wiped out four emplacements of machine guns and automatic weapons. Then he caught a bullet through the lung. But he stayed on, refusing evacuation, until sure the objective had been won.

"In Korea," says Captain Harvey, "we stopped aggression by united strength. You were helping—every time you bought a Defense Bond. Because your Defense Bonds were doing more than just helping keep you, and your family, and your country financially stable. They were backing us up in the field with American production power, the surest support any fighting man can have!

"I hope you'll go on buying Bonds—many, many of them. For your Bonds—and our bayonets—are making America strong. And in today's cold-warring world, peace is only for the strong."

Remember that when you're buying bonds for national defense, you're also building a personal reserve of cash savings. Remember, too, that if you don't save regularly, you generally don't save at all. Money you take home usually is money spent. So sign up today in the Payroll Savings Plan where you work, or the Bond-A-Month Plan where you bank. For your country's security, and your own, buy U.S. Defense Bonds now!

Peace is for the strong... Buy U.S. Defense Bonds now!



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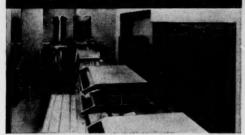
STAINLESS STEEL REFRIGERATORS

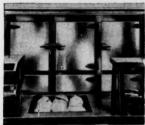
Performance-Proved

in the new cafeteria of

MINNESOTA MINING & MANUFACTURING COMPANY

St. Paul, Minnesota





Above: Partial view of service counter in new 3M Company Cafeteria showing one of the Herrick RSS66 Double-Front Pass-Through Stainless Steel Refrigerators installed there.

Left: A close-up view of another Stainless Steel Herrick serving this modern cafeteria.

Herrick units were supplied by Joesting & Schilling Company, St. Paul.

In its new office building at St. Paul, Minnesota Mining and Manufacturing Company has provided a modern employee cafeteria. To keep foods served here at the peak of freshness and flavor, this famous maker of "Scotch" tape, "Scotchlite" reflective sheeting and "3M" abrasive and chemical products selected HERRICK Stainless Steel Refrigerators. • Two six-door double front pass-through HERRICKS and one four-door HERRICK supply just the right combination of chilling, air purification, circulation and humidity to prevent food spoilage, avert discoloration and reduce shrinkage. For beauty, performance and cleanliness, HERRICK Stainless Steel Refrigerators are unsurpassed. Write today for the name of nearest HERRICK supplier. Do it now!

HERRICK REFRIGERATOR CO., WATERLOO, IOWA DEPT. N. COMMERCIAL REFRIGERATOR DIVISION



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"MODERNFOLD" doors give you more room

More Clussrooms because "Modernfold" movable walls quickly make rooms do double duty. Close these folding doors and you get two rooms out of one. Open them and you have one large room again.

More Room in Classrooms because steel-framed, vinyl-covered "Modernfold" doors fold rather than swing. No banging; no pinched fingers, Just more space in front of closets for extra desks and chairs.

How About Cost? Little more than swinging doors; on a par with permanent partitions. Only maintenance required, occasional washdowns with plain soap and water.

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Please send full details on "Modernfold" doors.
Name
Address
City State

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What's New.

Methods Manuals

A timely study of some of the vital needs of education and certain results of research and scientific knowledge which have aided education's growth through coordinated classroom environment, are presented in a new 20 page booklet, "Education Grows," recently published by the American Seating Co., Grand Rapids 2, Mich. The booklet covers the development of school seating in connection with improved classroom environment with resulting improvement in scholarship, vision, health and physique of the school child. An up-to-date bibliography of valuable reference sources on lighting, seeing, posture and child development is included in which are listed four articles from The Nation's Schools. (Key No. 540)

A new 50 page handbook on the "Fundamentals of Magnetic Recording" is now available from Audio Devices, Inc., 444 Madison Ave., New York 22. The Handbook has been written by C. J. LeBel, an authority on audio engineering, and contains technical data on magnetic recording including background, recording methods, magnetic relationships, tape characteristics and many other subjects. The pocket-sized volume is illustrated with charts, curves and diagrams. (Key No. 541)

A practical discussion of the importance of proper chemical laboratory fume hood installation is presented in a booklet, "Handle With Care All Laboratory Fume Removal Problems," recently issued by E. H. Sheldon Equipment Co., Muskegon, Mich. The carefully presented text is supplemented by drawings which illustrate the points made. Sheldon equipment designed to help solve this problem is mentioned. (Key No. 542)

An informative 12 page Swimming Pool Manual has been released by Koven Steel Swimming Pools, Inc., 155 Ogden Ave., Jersey City, N. J. The manual covers in detail all of the factors involved in planning municipal and community pools as well as pools for school or other institutional use. Entitled "So You're Going to Build a Pool!" the manual discusses the advantages of a steel swimming pool and gives full design, construction and erection details. Each design feature is clearly illustrated by drawings or sketches. (Key No. 543)

Film Releases

"I See the Wind," documentary motion picture dealing with the pre-school training of blind children, 16 mm., 20 minutes. Association Films, Inc., Dept. NS, 347 Madison Ave., New York 17. (Key No. 544)

(Continued on page 192)

"Land of Britain-England," 35 mm. filmstrip, 31 frames, with study guide, black and white. "Battle Against Erosion," 35 mm. filmstrip, 34 frames, with study guide, black and white. British Information Services, Dept. NS, 30 Rockefeller Plaza, New York 20. (Key No. 545)

"High School: Your Challenge," 16 mm., 11/4 reels, sound, color or black and white. "The Meaning of Engagement," 16 mm., 1¼ reels, sound, color or black and white. "Ancient Greece," 16 mm., 1 reel, sound, color or black and white. "The Easter Season," 16 mm., 1 reel, sound, color or black and white. Three films, Group IV, "Are You Ready for Service?" series: "Com-munism," I reel, sound, black and white; "Your Investment In the Future," 1 reel, sound, black and white; "Why You?" I reel, sound, black and white. Coronet Films, Dept. NS, 65 E. South Water St., Chicago 1. (Key No. 546)

"Sunny Iceland," 16 mm., 121/2 minutes, sound, color or black and white. Hollywood Enterprises, Inc., Dept. NS, 6060 Sunset Blvd., Hollywood 28, Calif. (Key No. 547)

"Drug Addiction," 22 minutes, black and white, for use in high school curriculum in health and hygiene and in

MAYLINE-

Classroom Desks and Chairs



For the Elementary Grades

Mayline desk and chair sets for the classroom where individual seating is desired.

Desk is made of Oak with choice of hardwood or composition plastic top. Select Maple is used for chairs. Desk avialable in open front or lift top styles. Reasonably priced. Literature forwarded on

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What's New ...

problems of democracy and guidance, also for college and adult levels. It presents facts about the growing menace of drug addiction. Produced in cooperation with the Juvenile Protective Association and the Wieboldt Foundation of Chicago. Encyclopaedia Britannica Films. Inc., Dept. NS, Wilmette, Ill. (Key No. 548)

"Waves of Green," 16 mm., Technicolor, sound, documentary picture of American agriculture and the American way of life. The Jam Handy Organization, Dept. NS, 2821 E. Grand Blvd., Detroit 11, Mich. (Key No. 549)

"Fhonics: A Key to Better Reading," 6 full-color filmstrips. "Alice and Jerry Reading Series—Second Grade Set," 5 filmstrips, each averaging 45 frames. "Plants, Animals and Insects," 4 full-color filmstrips, each averaging 48 frames. "Child Care," 4 black and white filmstrips, each averaging 40 frames. "Children's Stories," 6 color filmstrips for primary grades. "Basic Spanish—Set B," set of 5 black and white filmstrips for Junior High through College. "North American Indians and Eskimos," set of 6 black and white filmstrips, intermediate through college. "Great American Frontiersmen," set of 5 color filmstrips, intermediate through Junior High. Society for Visual Education, Inc., Dept.

NS, 1345 W. Diversey Pkwy., Chicago 14. (Key No. 550)

"New Tools for Learning," designed to create a better understanding of the use of motion pictures in teaching, 16 mm., 18 minutes, sound. Photographed and edited by Encyclopaedia Britannica Films for Center for the Study of Audio-Visual Education, University of Chicago, Dept. NS, Chicago 37. (Key No. 551)

"Adventure for Defense," filmstrip on Army induction process for high school seniors. Audio-Visual Materials Consultation Bureau, Wayne University, Dept. NS, Detroit 1, Mich. (Key No. 552)

Suppliers' News

General School Equipment Co. is the new name of the manufacturer of school furniture formerly known as Bargen-Built Industries, Inc., 422 S. Twelfth St., Minneapolis 3, Minn.

Gulbransen Company, manufacturer of pianos for classroom and other educational use, announces removal of its offices from 816 N, Kedzie Ave., Chicago 51, to 2050 N. Ruby St., Melrose Park, III

Pittsburgh-Des Moines Steel Co., Pittsburgh 25, Pa., manufacturer of grandstands, announces the opening of a new office at 6399 Wilshire Blvd., Los Angeles, Calif. The office will be in charge of R. C. Ross.

Magic Chef, Inc., is the new name taken by the American Stove Co., 1641 S. Kingshighway Blvd., St. Louis 10, Mo.

Porter-Cable Machine Co., Syracuse 2, N. Y., announces the sale of the firm's floor sanding machine line to Clarke Sanding Machine Co., Muskegon, Mich. Acquisition of the Porter-Cable patent rights, tools and fixtures will give Clarke Sanding Machine Co. a full line of floor finishing and maintenance machines. Moving of the assets purchased by the Clarke group from Syracuse to Muskegon is now under way.

Standard Projector & Equipment Co., Inc., manufacturer of Standard filmstrip projectors and filmstrip rewind-cleaners, announces change of address from 205 W. Wacker Drive, Chicago 6, to 7106 W. Touhy Ave., Chicago 13. P. J. Kilday has purchased Jack C. Coffey's interest in this company. Mr. Coffey will continue to market the Standard filmstrip library plan cabinets, visible filmstrip record systems and the selected teaching filmstrip annual through the Jack C. Coffey Co., 205 W. Wacker Drive, Chicago 6.



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INDEX TO PRODUCT INFORMATION & ABVERTISEMENTS

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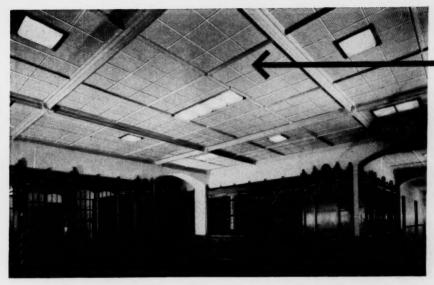
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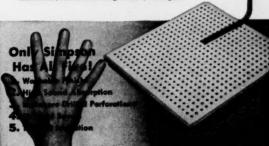
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